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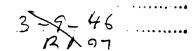
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ANCIENT EGYPT.

THE EGYPTIAN ELEMENTS IN THE GRAIL ROMANCE.

In the series of legends of which the Grail romance is composed, there is a tradition concerning Joseph of Arimathaea. Skeat has pointed out that this tradition is separable into two distinct versions; one, he says, is "legendary and does not greatly transgress the bounds of probability," while the other he stigmatises as "purely fabulous and obviously of later invention."

Both accounts begin with the imprisonment of Joseph after the Crucifixion, and his release by Vespasian. In the "legendary" version Joseph joins St. Philip, is baptised by him, accompanies him to Gaul, and is sent by him to convert Britain. But it is with the so-called "fabulous" version that I am concerned, as I hope to prove that it originated in Egypt.

This version appears, in spite of its incoherence, to be a solid block—if I may so express myself-of otherwise unrecorded history. It is evidently composed of three distinct portions: (1) In the first is the account of the war between the kings of Sarras and Babylon, called respectively Evalach and Tholome, ending with the defeat and death of Tholome. In this the part which Joseph plays is so small that it could have been omitted without injuring the story. (2) The second part is devoted to Joseph and his son Josephes; and to this belongs probably the long account of the consecration of Josephes, though it really occurs in the legend itself almost at the beginning of the story, perhaps for chronological reasons. The sermons of Joseph and the dreams of Evalach also belong really to the second part, which is in its essence the narrative of the conversion of that district of Egypt to Christianity. (3) The third part gives the adventures of Mordrayns and Nasciens, after the departure of Joseph and his little company of Christians, and ends with the re-union of all the dramatis personae in Great Britain. The third part does not seem to have had any real connection originally with the first, but by the simple expedient of changing the names of Evalach and Seraphe in baptism to Mordrayns and Nasciens, the two legends are fused into one. Malory, however, looks upon Evalach and "Mordrams" as two distinct personages. I give here an epitome of the legend, from the arrival in Egypt of Joseph, with his family and friends. to their departure and final re-union in Britain. I follow Lovelich's version as being the most detailed.

Chief personages mentioned in the legend:-

Ermonies. A hermit-saint.

Evalach, afterwards Mordrayns. King of Sarras.

Ferreyn. A giant.

Flegentyne. Wife of Seraphe.

Joseph of Arimathaea.

Josephes, or Josaphe. Son of Joseph. First Christian bishop.

Mordrayns, or Mogdanis. Baptismal name of Evalach.

Nasciens. Baptismal name of Seraphe.

Salustes or Salustine. A hermit-saint.

Sarracynte. Wife of Evalach and sister of Seraphe.

Seraphe, afterwards Nasciens. Duke of Orbery.

Tholome Cerastre. King of Babylon.

- I. Joseph of Arimathaea, with his family and friends, all Christians, leave Jerusalem by way of Ephrata and reach Argos, half a league from Bethany, in the country of Damascus. By divine command Joseph makes an ark of wood to contain the Holy Vessel.¹ Next day they reach Sarras, where King Evalach is holding a council of war. Evalach is a foreigner who had succeeded the old king of Sarras, and had conquered the whole land "iusk'en l'entrée de egypte." [A variant says that Evalach had helped Tholome in his campaign against Holofernes, and that Tholome had placed Evalach on the throne of Holofernes.] Evalach is at war with Tholome Cerastre, king of Babylon, who has invaded the country, captured cities, and is now besieging Castle Valachim. Joseph promises Evalach victory if he will become a Christian. The king lodges the strangers in the "spiritual palace," and gives such noble hospitality that the good food and the good beds are considered worthy of mention. Here follows the account of Josephes' consecration, which should properly come into the second part.
- 2. Joseph prophesies that Evalach shall fall into Tholome's power, but shall be victorious if he embraces Christianity; Joseph breaks the idols in order to prove to the king that they are devils. Sarracynte is already a Christian, having been converted by the hermit Salustes, who had healed her mother. When he died Sarracynte had helped another hermit, Ermonies, to bury him. She has, however, never acknowledged her conversion publicly.
- 3. Evalach hears that Tholome is besieging Castle Valachim, with twenty thousand horse and forty thousand foot. He dispatches his vassals to Castle Tarabe; and before he himself starts, Joseph makes, with two strips of red cloth, a cross on Evalach's white shield. The king then rides with "a Ryht gret Compenye of knyhtes" to Tarabe, where he stays for eight days assembling his troops. At the end of that time they set forth to raise the siege of Valachim. They pass through a forest, cross a valley, and climb a hill from the top of which the besieged castle is visible. In the battle which ensues, fifteen thousand men are killed, and Evalach is forced to retreat to Castle Comes, two miles away, hotly pursued by Tholome. The besieged garrison, by a sortie, capture Tholome's camp and equipment, so that Tholome, returning from the pursuit, finds his tent and pavilions all "to-broke."
- 4. In the morning Tholome learns that Evalach is at Castle Comes with a small retinue, he determines to take half his force to capture his enemy, the other under the steward Narbus remaining to continue the siege. Tholome starts late and marches all night. Meanwhile Evalach hears, from a spy, of the successful sortie of the Valachim garrison, and he leaves Comes with seven hundred horse and nine hundred foot to make another effort to raise the siege. Five miles from Comes he meets a messenger from Sarracynte warning him to leave that castle as Tholome is on his way to besiege it. Evalach then makes toward Sarras, and meets Seraphe who is bringing a body of four thousand horse to his aid. On Seraphe's advice they all go to Orkauz rather than to Sarras, as being a stronger city and more central for news. Close to Orkauz is a red rock called the Rock of Blood. It is four bowshots high, and between it and the river is a narrow passage, wide enough for only ten men to walk abreast.
- 5. Evalach remains at Orkauz a day and a night to assemble his forces. Early in the morning part of Tholome's army arrives before the town. Evalach leaves an old knight and a hundred men as a garrison, and attacks the enemy, who,
- ¹ "Forto do in thilke blod thou bearest about." Alliterative Lyfe. Skeat. Early English Text Society.

weary with the long night march, are easily routed. Evalach and Seraphe skilfully drive them to the passage by the rock, where the slaughter is so great that the rock is stained red and is called the Rock of Blood afterwards. Two miles beyond the rock, Tholome's main army is seen advancing, and a pitched battle ensues. Evalach's force is divided into four battalions: the first under Seraphe, the second under the steward, the third under an old worthy warrior named Archimedes, and the fourth under his own command; at the same time he sends Jeconias to guard the Passage of the Rock. Tholome's army is divided into eight battalions; and the order of battle is that the first two shall go against the steward, the third and fourth against Archimedes, the fifth commanded by Tholome against Evalach, and the sixth against Seraphe, while two battalions are held in reserve. Evalach has 10,300 men in each battalion, 41,200 in all; Tholome has 16,000 in each battalion, 128,000 altogether.

- 6. A tremendous battle takes place; and but for Seraphe's heroic deeds, Tholome would have had an easy victory. But weight of numbers begins to tell: Evalach is taken prisoner, and is led into a wood to be disarmed and killed. In this extremity he casts his eyes on the red-cross shield and, remembering Joseph's prophecy, he prays for help. At once there issues from the forest a knight royally armed, with a red-cross shield about his neck and riding a horse "As whyt as the Lylye Flow'r." The knight seizes Tholome's bridle rein, and leads the Egyptian king through the Passage of the Rock. On the further side is an open space: the white knight looses Tholome, charges at and unhorses him. Evalach runs up and makes him prisoner, while Tholome's immediate followers are killed or captured by Evalach's soldiers. Jeconias removes all the prisoners to Orkauz, while Evalach returns to the fight.
- 7. Here the white knight, carrying Evalach's banner, is fighting beside Seraphe. Evalach leads his men on, and Seraphe attacks the Egyptian rearguard. The Egyptians draw, or are driven, back to the Rock, hoping that they may escape that way, but it is already held in force by Jeconias. Caught between two forces, the Egyptian army is cut to pieces:—

"And thus the Egypcien, be goddis Myht, At theke tyme weren distroyed be fyht."

Orkauz is so full of prisoners that Evalach has to camp outside for the night. Next day Evalach and Seraphe return to Sarras. This appears to me to be the end of the first part, the second part being devoted to the account of the conversion of Evalach and his subjects to Christianity.

- 8. A wounded knight is miraculously healed by touching the cross on Evalach's shield, a sight which converts Seraphe, who is baptised by the name of Nasciens. Seraphe then converts Evalach and the wounded knight, who are both baptised and are called Mordrayns and Clamacides respectively. By the particular favour of God, Tholome dies at this time "with Dolowr." Sarracynte at last acknowledges her own faith, which she has held in secret for twenty-seven years, and the people of Sarras, to the number of five thousand and more, are baptised.
- 9. To this second portion belongs probably the consecration of Josephes, which I shall consider in detail later. Joseph leaves the ark at Sarras under the charge of three men, and goes to Orkauz to destroy the idols and to convert the people. Mordrayns banishes all those who will not accept Christianity. Joseph then goes to Nasciens' country, breaks the idols, and baptises the people. On his return to Sarras he ordains thirty-three bishops: sixteen to remain at Sarras, the

remainder to go about preaching. He then sends for the bodies of the two hermits, Salustes and Ermonies, and buries one at Sarras, the other at Orbery, erecting a church over each.

- 10. Joseph exhibits the Grail to Mordrayns and Nasciens; the latter lifts up the "plateyne" above the glorious vessel and is at once struck blind, but miraculously healed later. Joseph, having explained the mysteries of the Grail, leaves the country accompanied by two hundred and seven people. This is the end of the second part; Joseph does not appear again in the narrative till he is about to cross the sea to Britain.
- II. The third part is devoted to the adventures of Mordrayns, Nasciens and Celidoine, and introduces an entirely new set of incidents. Mordrayns and Nasciens are alone in a room in the palace, when, to the accompaniment of an earthquake and horrible noises, Mordrayns is whisked away and disappears. Nasciens is accused by the wicked Sir Calafere of having murdered the king and is imprisoned, in spite of his sister's entreaties.
- 12. Mordrayns finds himself on a rock, seventeen journeys within the sea. This rock stands in the route from Scotland and Ireland to Babylon, and is so high that Wales and Spain are visible from its summit; it is a desert without arable land. Here there is recounted an incident of Pompey's naval campaign against the Cilician pirates, whose headquarters are said to have been at this rock. Various supernatural people arrive in ships to tempt Mordrayns or to console him, amongst others the hermit Salustes, upborne above the sea by two birds under his feet.
- 13 Meanwhile, Calafere has thrown Celidoine into prison with Nasciens, and deprived Flegentyne of her possessions. On the seventeenth night, which was the ninth day of the kalends of juignet (July), Nasciens is miraculously released from prison and carried away. Calafere then attempts to kill Celidoine who is snatched away by nine snow-white hands, while a thunderbolt kills Calafere. Sarracynte sends five messengers to find Nasciens. Nasciens has been put on the Turning Isle, where he has supernatural visitants.
- 14. Flegentyne takes refuge with an old vavasour; she then goes in search of Nasciens, taking the vavasour and his son with her. They start as if for Sarras, then turn to the right and go westward; they cross the river Arecuse "that toward Orbery Ran In gret haste," and after riding all day they reach a royal place of lime and stone standing beside the castle of Emelianz, "that marched next to the dwchie On that flood." This is a heathen country. Next day they ride five leagues and arrive in the country of Calamyne, where nard, cinnamon and balm are found. On the third day they come to the city of Lussane, the capital of the king of Meotide.
- 15. Celidoine has also been put on an island. During a storm two ships take refuge at the island. These are full of Persian soldiers on their way to the campaign in Syria. Celidoine converts Labell, the Persian king, who is baptised and dies. The Persian soldiers accuse Celidoine of having murdered the king, and as a punishment send him afloat in a little ship on which they have put a fierce lion. After various adventures he reaches the Turning Isle, where he finds his father. The two embark on Solomon's ship and meet Mordrayns in another ship. All go on board Mordrayns' vessel.
- 16. Queen Sarracynte's messengers arrive at Tosquean (Roquehan), the birthplace of the parents of St. Mary the Egyptian. They are informed in a vision that Nasciens is in a ship on the sea towards Greece. They therefore make for the

coast, riding through a country so hot (it is now August) that all the men go naked. One of the messengers dies of thirst and is buried in the chief city of Egypt, "where-Offen Alisaundre is the Name." They find a ship in which are two hundred dead men and a living girl; she is the daughter of King Labell, and the men are Persian soldiers killed in a sea fight. The messengers bury the dead, then go on board the ship with the damsel. The vessel is blown out to sea, strikes a rock and sinks, and two of the messengers are drowned. The other two messengers convert the damsel to Christianity, and all three are rescued from the rock by an old man who arrives in a little boat with Celidoine's lion. The little boat goes straight to the ship which is bringing Mordrayns, Nasciens and Celidoine. The whole party are united on the big ship, and

"the lytel vessel wente with the lyown as faste Away As Evere flew swalwe In the someris day."

- 17. After two nights they come in sight of Castle Barne, which belonged to Mordrayns' son and was "In the Ottrest partye of his Owne land Toward the see." The hermit Ermonies appears, clad as a priest and walking on the water. At his command Celidoine enters an empty boat and sails away. The rest land at Castle Barne, Sarracynte comes to meet them; Flegentyne returns from the land of Meotide, and the whole party are re-united at Sarras. This would seem to be the legitimate end of the Mordrayns-Nasciens adventures; but the loss of Celidoine, and the search for him, continues the story.
- 18. Nasciens departs by himself in secret to find his son. Flegentyne sends people to find Nasciens and to bring him back. Nabor, a wicked knight, tracks Nasciens by the nails in the horse's shoes, and finds him fighting the giant Ferreyn. Nabor kills Ferreyn, then tries to kill Nasciens for refusing to return; he drops dead at Nasciens' feet. Nasciens' people come up, and the situation being explained, the lord of Tarabel thinks Nabor was well served for having tried to kill his liege lord. A divine voice denounces the lord of Tarabel as a parricide and a thunderbolt strikes him dead. At Nasciens' request, Flegentyne buries the three bodies, and erects three tombs called the Tombs of Judgment "in the Entre be-twene Tarabel and babiloine." She returns to Castle Bellyc, and Nasciens proceeds to the coast and enters Solomon's ship.
- 19. Joseph of Arimathaea and his followers arrive at the coast opposite Great Britain, where there are neither ships nor galleys. The Grail bearers walk dryshod over the water; Josephes spreads his shirt on the surface of the sea, and God so stretches it that a hundred and fifty people are conveyed across upon it. The rest of the company, who were sinners, remain on the shore weeping.
- 20. Nasciens, after several days, arrives at the place where these sinners are waiting. He takes them into his ship and they all reach Great Britain, where they find Joseph and his party, and Celidoine as well. On their arrival in North Wales, King Crudelx imprisons them. Mordrayns, warned in a vision of their predicament, leaves Sarras with Sarracynte, Flegentyne, and King Labell's daughter, and rescues his friends.

I propose to examine: (1) the place-names; (2) the personal names; (3) the details which show an Egyptian origin; and (4) I shall discuss the probable date.

My sincere thanks are due for much kind help: in the Arabic words and derivations from Prof. T. W. Arnold; and in the liturgical parts from Mr. Henry Jenner.

I. The Place-Names.

Babylon. Rock of Blood.

Barne. Sarras. Comes. Tarabe.

Damascus. Tombs of Judgment. Mordrayns' Rock. Turning Island.

Orbery. Valachim. Orkauz.

That the whole action takes place in Egypt is indicated, at the beginning of the legend, by the route which Joseph followed on leaving Jerusalem. He went south by way of Ephrata, and journeyed without incident till he reached Argos, or Agais, near Bethany, in the country of Damascus. Most of the modern commentators have put this down to an ignorance of geography on the part of the "inventor" of the legend, and have therefore made no further investigation. The confusion has arisen from the fact that the desert which lies between Suez and the Delta to the south of the Wady Tumilat is known as Gebel Damashq, the country of Damascus. There are caravan routes across this desert from Ras al-Wady to Cairo, Belbeis, and Al-Khankah, which are shorter than going through the cultivated country. It was in this desert, probably on the edge, as Argos was the name of a wood, that Joseph halted. The name Bethany is probably a local name, which in its spelling has been influenced by the better-known Biblical name; Beth Ain, the House of the Well, is perhaps the origin.

The next place mentioned is Sarras, "si estoit entre babiloine & salaundre." 1 This indication of a position between Old Cairo (i.e., Babylon) and Alexandria at once narrows the enquiry to the western side of the Delta. Here, in the province of Manuf in the south-west of the Delta, are several villages, of which the word Sarras forms part of the name: Sersa, Sersmūsi, Sersenā, Sers al-Liyaneh, and so on. The word as written in Arabic is سرس SRS, which, when pronounced with a slightly rolled R, would be written phonetically as Serras or Sarras in a European language. The legend gives a very clear indication as to which Sarras is intended, by specifying that the one in question contained a spiritual place or palace. This is not the "spiritual city" of Tennyson but a solid tangible place, a building into which Joseph and his followers entered, where they lodged, where the Grail was left under the charge of three appointed men, where Josephes was consecrated, and where his episcopal chair was preserved as a holy relic; within "the spiritualities" also Sir Percival's sister, Sir Percival, and Sir Galahad were buried. Reviewing these statements the "spiritual place" resolves itself into a Christian church: in its sanctuary, mass was celebrated, the Eucharistic vessels were kept, and bishops were consecrated; in its cemetery, Christians were buried; and in its guest-rooms, travellers were housed. Of all the Sarras villages only one contains a church, Sers al-Liyaneh, which has a church dedicated to Māri Girgis, or St. George. No evidence is forthcoming as to the date of the present structure, but that the dedication is as old as the legend is shown by Joseph's placing the red cross of St. George on Evalach's white shield. When Evalach as a prisoner appeals to this emblem, a knight bearing a red cross shield comes to his rescue, performs great feats of valour and vanishes when the day is won. It can hardly be doubted that this knight was Māri Girgis himself. It must, however, be taken into

¹ Li Livres du Saint Graal, leaf 10, col. 2. Early English Text Society.

consideration that Sersenā, some distance to the north of Sers al-Liyanch, was a bishopric in the fifth century; for the bishop of Sersenā was present at the Council of Ephesus. There is, however, as far as I know, no church or tradition of a church at the place; therefore in following Evalach's campaign I look upon Sers al-Liyaneh as the Sarras of the legend.

Since writing the above I have received, through the kindness of Marcus Simiaka Pasha, the following information concerning Sers el-Liyaneh and Sersenā: "The Church at Sers el-Lianna is quite modern. It is dedicated to St. George, and possesses, besides an icon of the Patron Saint, icons of our Lord, the Blessed Virgin, etc. The church has no history. There is in the same village a mosque built on a mound surrounded by houses. The Parish Priest writes to say that one of the oldest inhabitants assured him that a great many years ago one of these houses was demolished, revealing the door of an ancient church under the mosque. The door was walled up, and the house rebuilt. Sarsina is not far from Sers el-Lianna. There was an Episcopal Church at Sarsina but there is no trace of it now. The name of Sarsina often occurs in Coptic Church literature. Saint Liaria, who is commemorated by the Coptic Church on the 25th Abib, went there before she received the crown of martyrdom. A Bishop of Sarsina was present at the Council of Ephesus. I also find that a Bishop of Sarsina was present at a Council which was convened at Misr by Cyril, 67th Patriarch of Alexandria, who ruled the Coptic Church, between A.D. 1076 and 1089, during the reign of the Fatimite Khalif Al-Mustansir and the Vizierate of Emir al-Guyūsh. The same Bishop was present at a garden party at the Vizier's palace with the Patriarch and forty-six Coptic Bishops on the 23rd Misra, A.M. 802 (August, 1085). occasion Emir al-Guvūsh asked the Patriarch and the assembled Bishops to prepare a revised edition of Coptic canonic laws."

I am able to identify only a certain number of places mentioned; some of them are called by different names in different versions; thus Oriable, the city taken by Tholome Cerastre, is also called Nagister and Ouagre, neither of which names can be found. Oriable might be one of the many names ending in *opolis* contracted to *opol*, thence to *able*; but as the city is not important to the understanding of the story, I have not made much effort to find it. In some of the names, the ordinary variations of consonants occur, B and V, L and R, and perhaps B and M.

Tarabe is the first place to which Evalach went from Sarras. This is called in different versions Tarabel, Tarabiel, Carabel, and Carboy. It was sixteen miles from Valachim and twenty from Sarras. The variation in the spelling of the name shows that in some one instance it must have been written phonetically. The form with final I seems to be influenced by the spelling of the name Tarabel, whose lord was a liege-man of Seraphe; but as Tarabe belonged to Evalach the two can hardly be identical. It is evidently a three-syllabled word, beginning with T or a hard C. Taking the form with initial C as the original, Tarabe may perhaps be found in the modern Qalameh, in Coptic Keneua. This place is about twenty miles from Sarras, though only nine as the crow flies from the place which I think can be identified as Valachim. To reach it Evalach must have made a détour either to the north or south in order to avoid Tholome.

Valachim is also called Valachin; and the French version gives Evalachin, apparently deriving the name from the king; this derivation cannot I think be considered seriously. The description shows that the castle was very strong; the gate was a stone-cast high, and beneath it ran a river an arrow shot wide. There

was only one other gate, a small one in a corner, in front of which was "plein Erthe" for thirty paces. From the description of the fighting, Valachim lay to the south of Sarras. To the south of Sers al-Liyaneh is a place called Al-Barashim (in the French maps Barchoum), a name which coincides letter for letter, in the Arabic, with Valachim; even the E in the form Evalachin is accounted for by the prefixed definite article. Al-Barashim is situated on the east bank of the Damietta Branch of the Nile. The description says that the river actually ran through the town, but this may be intended to mean a channel diverted from the main stream. The military importance of Valachim must have been very great, lying as it did either on or actually over the river, and will account for Tholome's anxiety to take it, and for Evalach's risking a severe defeat in the attempt to relieve it.

Castle Comes has the variants Coines and Lacoines. These I take to be a mistake of the copyist, who has taken the m of Comes to be in; the same mistake reversed is seen in the names Mordraines and Celidoine, which become Mordrames and Celidome. The definite article La simply translates the Arabic Al; the word Comes representing the Arabic $K\bar{u}m$ or $K\bar{o}m$ \ddot{v} a mound, with the usual latinised termination. Mounds are so numerous in Egypt that, unless some distinguishing epithet is included, it is impossible to identify so common a name. There is a $K\bar{u}m$ at-Taiss west of Al-Barashim, but several miles from that town. The text, however, does not give the distance from Valachim, but from the place whence Evalach retreated. From $K\bar{u}m$ at-Taiss he could return to Sarras by keeping to the edge of the desert, thus obviating the risk of a collision with Tholome's army. It was on this journey that he met Seraphe.

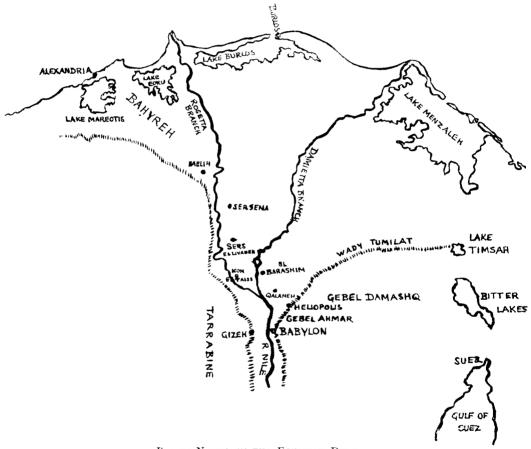
Seraphe was the ruler of Orbery, the variant of the name being Orberike. This I take to be Al-Bahri, the North; the guttural seems to be usually dropped, though a reminiscence of it remains in the form Orberike. A proof of the northern position of the place is given in the description of Flegentyne's journey in search of Nasciens. She starts from Orbery along the road to Sarras, then in order to go westwards she turns to the right. Seraphe's own name, as I shall point out later, is North-Egyptian. Seraphe, arriving from his own province, and keeping to the west, would leave Sarras at some distance to the east, and would meet Evalach south of that town.

Evelach and Seraphe betake themselves to Orkauz (variant: Arkauz). It is one of the chief cities of the king of Sarras, and near it is the Rock of Blood. The position of the Rock is given thus:—

"And Into the Ryht side it laste Evene ryht, Down to the water of Orkauz . . . And the left partie it Ran Evene West, Into Babyloigne that Riuere went ful prest."

The red rock, then, is near both Orkauz and Babylon and stands close to the water of Orkauz, which ran rapidly from Orkauz to Babylon. Babylon is of course the great fortress which played so large a part in the defence of Egypt against the Arab invaders, and is now known as Old Cairo. It lies to the south of the modern Cairo. Not far to the north of Babylon is the Gebel Ahmar, or Red Hill, rising three or four hundred feet. The exact position of the river bed in this neighbourhood in mediaeval or still earlier times is not very accurately known. Orkauz, from the description, lay to the south of Babylon, yet within striking distance of the Gebel Ahmar. The first syllable of the name, as in Orbery, appears to me to be the Arabic El or Al, the definite article. The only place, the name and position of

which correspond with the text is Al-Gizeh, or rather Gīz; the word means, according to Maqrizi, the side of a valley, singular gizeh, plural gīz. From Gizeh, which lies nearly opposite to, but slightly to the south of, Old Cairo. the river would run "into Babyloigne." It was a commanding position, as from it Tholome's movements could be watched. The difficulty is that it is on the west of the river, and no mention is made of a crossing, which would certainly have been the case had Evalach had to move his army of forty thousand to the eastern bank. The only solution is that the passage by the Rock is a misunderstanding for a bridge or causeway of some sort; the battle would then be fought for the possession of the bridge. Great stress is laid throughout on the importance of this narrow passage, which cannot be explained if it were merely an inconveniently narrow path on one side of the river. The neighbourhood of the Gebel Ahmar has



PLACES NAMED IN THE EGYPTIAN DELTA.

always been a traditional field of battle, for it was here that Horus fought against Set. In examining the map, it will be seen that Evalach held both the Rosetta and Damietta Branches of the river, and apparently also the main stream at the head of the Delta. Tholome was attempting to capture Valachim which commanded the Damietta Branch; and failing that, he fought a pitched battle for the possession of the river near Babylon. To anyone who knows the country, this plan of campaign appears remarkably sound. Evalach's desperate resistance against an army much greater than his own shows that he realised the importance of the positions attacked. To hold the river meant then, as now, to hold Egypt.

In the last part of the story there are a few names which suggest an identification with places to be found on the map. The names in Flegentyne's journey in search of Nasciens are obviously real from the careful particularity with which they are mentioned, but I have so far failed to identify more than one. She appears to have gone due west into a country which is now a barren desert, but "there is express evidence that practically the whole of the coast provinces west of Egypt continued well populated and well cultivated for some three centuries after they fell under Arab dominion." (Butler, Arab Conquest, p. 10.) After several days' journey Flegentyne reached Lussane, which may very well be the modern Lucha, which is called Luchon by the Spanish Franciscan who visited the place in his travels through Barbary in the middle of the fourteenth century.

Mordrayns' Rock is said to lie between Scotland and Babylon, and between Ireland and Babylon. This suggests that it was on the sea-route from the west of the British Isles, which was by way of the Bay of Biscay and the Pillars of Hercules; and not on the land route by way of France and the English Channel. The Rock of Gibraltar answers somewhat to the description as being near Spain and Gaul, or perhaps Galicia (Gales=Wales), and being barren and without arable land; its position also, lying as it does on the sea-route for vessels from Egypt to the west of the British Isles, is also in favour of this identification. Against this, however, is the fact that Pompey's naval war against the Cilician pirates was actually in the Eastern Mediterranean, and there is, I think, no proof that he went as far west as Gibraltar in that campaign.

The description of the Turning Island reads like the attempt of someone accustomed to a tideless sea to describe the phenomenon of the ebb and flow of the tide. The island is drawn down into the sea, and the water rises till it nearly covers the land, then the island disengages itself and gradually draws out of the water till it reaches its original height and breadth, and this happens every time the firmament turns. No explanation is given of the turning of the firmament, which seems to be considered something of daily occurrence. The mixture of piety and pseudo-science in the explanation of the phenomenon of the Turning Island, especially the account of the loadstone, is quite in the style of Arab writers; and it is noticeable that wherever in Arabic we should expect the name of God, there is here always a paraphrase: "Ii establissieres del monde," "Ii souuerains peres, qui est fontaine de toute sapiense," "chelui a qui toutes choses sont obeissans."

The messengers are said to pass through Egypt where the people are naked in the hot months—and it is worth noting that the whole action is said to take place in the height of summer. This part of the country is obviously the Delta, for the messenger who succumbed to thirst is buried at Alexandria, showing that he must have died near that city, for the body could not have been carried very far in the great heat. On the return of the party, they land from the ship at Castle Barne on the coast, which may very well be the modern Burlos. Burlos, lying as it does at the entrance to Lake Burlos and the mouth of the Damietta Branch, was of great importance, and must have been a strong fortress.

In the last part of the legend, two place-names are mentioned, Castle Bellyc where Flegentyne stays, and Tarabel where the Tombs of Judgment are set up. Bellyc is in Orbery and may be Meliḥ in the province of Al-Bahyreh. The legend implies, though it does not say so, that the tombs were erected where Nasciens fought with Ferreyn; in describing how Flegentyne took money and workmen to make the Tombs it shows that they were at a distance from Castle Bellyc; the exact position is given as being in "the Entre between Tarabel and Babiloine."

This can only mean the part near Cairo, and may be a confused reference to the Pyramids of Gizeh; the highest, *i.e.*, the Second Pyramid, being in the middle. This identification is made the more probable by the fact that the district to the west from Abu Roash to Dahshur is known as Tarrabine.

The Personal Names.

The names of the principal characters also show an Egyptian origin. The most striking is that of Tholome, king of Babylon. This name is given to two kings: I. Tholome, who fought against Holofernes, and to whom Evalach fled from Syria; and 2. Tholome Cerastre. who invaded the kingdom of Sarras and whom Evalach finally defeated. The name is clearly a reminiscence of Ptolemy; and as it is applied to more than one king of Babylon, it is evident that there was still a popular tradition of several kings of Egypt bearing that name. Apart from the fact that Tholome was king of Babylon, the connection with Egypt is again proved by the epithet of "Egipcien" always applied to the army of Tholome Cerastre. The variants of the king's name are Tholomer and Tholomes; for the final r I can offer no explanation, but the final s appears to be the masculine termination of the Latin and occurs in many of the proper names.

Ermonies (variant, Hermione) is the Coptic saint **repuise**, Hermine, Latinised as Arminius. His day is kept in the Coptic calendar on the 2nd of Kihak (Nov. 28). Very little is known of this saint: the legend given in the Synaxarium is obviously not historical, it consists almost entirely of his ordination by the chief apostles and of an encounter with the devil. He is said to be buried at Qaû, and miracles occurred not only at his tomb but at every church dedicated to him. Salustes (variant, Salustine) is the other hermit-saint; I have not yet been able to identify him, but the mention of birds beneath his feet should lead to his identification.

Seraphe (variant, Seraphee) bears a name which can be traced back to Egypt. The variant shows that it is a three-syllabled name. It is a form of Serapis, the final s in this case being omitted; the aspirated P is common in Boheiric (thus nai becomes ϕ ai); this pronunciation was probably transmitted by the Egyptians of the Delta to their more northern neighbours, and we get Pharaoh for the Egyptian and the Coptic $n\bar{p}po$, ϕ a for the Egyptian \bar{b} . Serapis was also a god of the North, and his name would in all likelihood be given to a man of the Delta. Seraphe was evidently a popular hero, and it is therefore quite possible that some of his warlike exploits were originally told of a god.

The name Sarracynte suggests a derivation from Saracen, but it must be remembered that it might derive also from the name of the town of which she was queen. The termination in which is found in several of these personal names,—e.g., Mordrayns,—is the Arabic ين in, the genitive plural. It is found in the word Saracen, which is the Arabic شفتين Sharqiyyīn, meaning "[the people] of the East."

Nasciens (variants: Natianis, Vaciano) is shown by the variants to have been pronounced as though the second consonant had the sound sh, Nashyens. There is in Arabic a verb which means "to grow up"; a noun from this would be $\frac{s}{2}$ $\frac{s}{2}$

The name of Evalach has hitherto been equated with Avalloch, the god of the dead in Celtic mythology, with whom the name Avalon is perhaps connected. Though this equation is possibly quite accurate when the Grail legend becomes fused with the Arthurian cycle, yet when the legend is still in its Egyptian form, the derivation of the name must be looked for in Egypt, in either Coptic or Arabic. Here the analogies of the mediaeval forms of Arabic names must be taken into account, and of these the most suggestive are the forms Avicenna from Ibn Sina, and Averroes from Ibn Rushd. It seems then quite justifiable to derive the first part of Evalach from the Arabic *Ibn*; the name might very well be al-Akh, "son of the brother"; or, as matrilineal descent continued till the Christian era in Egypt, in either of these would become Avelach or Evalach in the mediaeval European form. I shall have more to say later, on the connection of this name with Evalach's succession to the throne of Sarras.

The name by which Evalach is known in the later part of the legend is Mordrayns (variant, Mogdanis). The interchange of r and g suggests the Arabic $\dot{\varepsilon}$; the prefixed ma or mo being a participial form common in personal names, e.g., Muhammad. In the variant Mogdanis, the termination an is perhaps the termination found in personal epithets or names, such as Raḥmān. I cannot suggest a derivation for the name Mordrayns, or Mogdanis, as the root $\dot{\varepsilon}$ would give the meaning "treacherous" to the name. This is hardly likely under the circumstances.

Of the minor characters of the story, the giant who killed travellers is called Ferreyn. Here again is an Arabic form Pharaoh. This use of a title so familiar to us is peculiarly Arabic, the Pharaoh of the Exodus being always so held up to execration as one of the wickedest of men, that the word has come to have the meaning of "Tyrant."

The name of the god Appollin is also worth noting, for it occurs in the Arabic Synaxarium (Hathor 18 and elsewhere) as الباري Ablūn, a god to whom Christian martyrs were often ordered to sacrifice. Apollo was equated by the Greeks with Horus, and was therefore one of the principal deities worshipped in Egypt. The other idol was inhabited by a devil named Aselebas. The termination as as in other names is probably the Latinised masculine ending, and may be ignored. The demon is therefore Aseleb, which suggests the Arabic القالم Aṣ-ṣalīb, the l of the definite article coalescing, as is usual, with the initial s of the noun. Aṣ-ṣalīb means "the crucified," and is an epithet not unlikely to be used by non-Christian peoples for a demon. The name of the demon might be anterior to the story, or it might be a generic name given by the popular language to all evil spirits as a pious hope regarding their future fate.

I come now to a name which I approach with a certain amount of diffidence, and that is Joseph of Arimathaea. As regards the "Joseph" there is I think no difficulty, it is the "Arimathaea" which requires explanation. Here again the variants are of great value in the elucidation of this point:—

Arimathaea. Abaramathie. Armathy. Barmathy. Abarimacie. Barmacie.

The form with B gives an indication of the derivation. As the story derives from Egypt, and the place-names are Egyptian, it is in that country that the name must be sought. The termination in i or y indicates the nisba-form, therefore one

must look for a name beginning with B and ending with th or s (the soft c being used instead of s). A place-name, which corresponds exactly, is Baramūs, Coptic BAPAUOTC; this was in the Wady Natrūn, and was the site of a celebrated monasterv. Yūsufu Baramūsi, or Yūsufu 'l Baramūsi, Joseph the man of Baramūs, would easily become corrupted into Joseph ab Aramacie, or ab Arimathy, the ab being taken for the Latin preposition; and without any difficulty the name would pass into that of the well-known personage of the Gospel history, Joseph of Arimathaea. A further proof of this derivation lies in the legend of St. John Kolobos of Baramūs, who, at the command of his Superior, planted his staff and watered it till it put forth leaves and became a thorn tree. It can hardly be a coincidence that two saints, with both of whom the legend of a planted staff is connected, could quite well be called Al-Baramüsī. There is another interesting point as regards the name of Joseph: John of Glastonbury, quoting from the Book of Melkin, speaks of "Joseph de marmore, ab Arimathia nomine." meaning of marmor is a flat, glistening surface, and is therefore applied to a sheet of water, either a sea or lake, and for the same reason, to marble. may refer to the fact that Joseph arrived in Great Britain from oversea; but remembering the part which the lake plays in the History of the Grail, and that Lancelot du Lac is, according to some accounts, the direct lineal descendant of Joseph, it seems probable that the word should be rendered "Lake," and the passage would then be translated "Joseph of the Lake, called From Arimathia." This is very important as being the earliest record of his name. It would also agree very well with the Egyptian origin of the legend, as the Lake-province—now called the Fayūm—has been a marked feature, both physically and politically, from the earliest times. The Fayūm also figures largely in Coptic literature as the birthplace of many saints.

One of the most important personal names to be studied is Mclkin, which is as yet unexplained. Asser, in his Life of King Alfred, speaks of the "pious and erudite men, Gildas, Melkinus, Nennius and Kentigern," but gives no details, though the mention of him shows that Melkin was well known as an author in the ninth century. The Book of Melkin, however, is known only from the quotation in John of Glastonbury, and was presumably a manuscript in the library of Glastonbury Many conjectures have been made as to the personality of Melkin; the only indications given are: "A certain priest [Soothsayer] of the Britons, named Melkin," and "This writing is found in the Book of Melkin who was before Merlin." The last sentence introduces the vexed question as to the date of Merlin, but with the Arthurian cycle our legend seems to have little or nothing to do. No satisfactory explanation of the name Melkinus has yet been offered. termination may of course be disregarded, but the Latin form preserves the long vowel in the second syllable. If then the name is pronounced Melkin, the Arabic origin is at once discernible. The word is obviously ملكيين milkiyyīn or malakiyyīn, the genitive plural of the, an adjective derived from the "a king"; it can therefore be translated King's men, Royalists, Melkites. This opens up the question, which I do not propose to discuss, as to whether the manuscript took its name from that section of the Coptic Church which held the political power before the Arab conquest, or whether it refers to King Evalach's followers. however, is certain and that is, that although the word survived to the time of John of Glastonbury (circa 1400), the meaning was lost and كتاب الملكنيي Kitabu 'l-Milkiyyin became Liber Melkini, the Book of Melkin.

Wolfram von Eschenbach states in so many words that the legend which he followed was originally written in Arabic, the manuscript being at Toledo:

"For Kiot of old, the master, whom men spake of in days of yore, Far off in Toledo's city, found in Arabic writ the lore By men cast aside and forgotten, the tale of the wondrous Grail. But first must be learn the letters, nor black art might there avail. By the grace of baptismal waters, by the light of our Holy Faith, He read the tale . . .

'Twas a heathen, Flegetanis, who had won for his wisdom fame, And saw many a wondrous vision (from Israel's race he came, And the blood of the kings of old-time, of Solomon did he share,) He wrote in the days long vanished . . .

Then Kiot my master read this, the tale Flegetanis told."—(Bk. IX, ll. 351-379, transl. WESTON, *Parzival*, II, p. 262, ed. 1894).

This seems to show that the Grail Legend was in its origin Eastern, and was introduced into Europe in Arabic manuscripts; into Spain by Flegetanis, into England by the *Book of Melkin*. In both cases the date of the manuscript must have been after the Mahomedan conquests of Syria and Egypt in the middle of the seventh century. There is no matter for surprise in finding the record of an Arabic manuscript at Toledo in the time of Wolfram's predecessor, as that city was regained from the Moors by the Christians towards the close of the eleventh century; the really surprising thing is that such a manuscript should contain a legend which we are accustomed to regard as essentially Christian, or essentially Celtic.

In the quotation from the Book of Melkin, given by John of Glastonbury, mention is made of "Abbadare, ruler in Saphat, noblest of the pagans," who is buried at Glastonbury with 104,000 of his soldiers. Here again is another suggestion of the Egyptian origin of the names. Abbadare might well be ابو الدّار Abu 'd-dar, "Lord or Master of the City," or ابو الدير Abu 'd-Dayr, "Father of the Monastery." Neither of these are known names, but they are analogous to the phrase ابو المثوي. Saft is so common a place-name in Egypt that, like Kūm, it must be defined by an epithet before it can be identified. If, however, a king of Saft came to England with a band of followers, and was buried with them at Glastonbury, we may very well see in him the original of Mordrayns, also a king in Egypt, who came with his army to Britain. Mordrayns founded, in the land of his adoption, a monastery in which he was buried; Abbadare, if we take the form Abu 'd-Dayr as the origin of the name, must also have been the founder of a monastery, and we have the definite statement that he was buried within the precincts of Glastonbury Abbey.

M. A. MURRAY.

(To be continued.)

FRENCH AND ITALIAN EGYPTOLOGY.

SINCE Sir Gaston Maspero was appointed as "Secrétaire Perpétuel" of L'Academie des Inscriptions et Belles-Lettres, the number of papers published in the *Comptes Rendus* upon Egyptological subjects has increased. Moreover, as Sir Gaston is practically the editor, it may be relied upon that the statements in the articles, and the translations of inscriptions, or papyri, have his sanction as being accurate.

The following review of the important Egyptological essays gives the most interesting and valuable researches set forth by their authors. M. Moret describes "A List of the Nomes of Upper Egypt," publishing one of the surprisingly early era of the VIIIth dynasty. This is a most necessary document for the geography of ancient Egypt, because previously the enumeration of the Southern Nomes had to be, as far as possible, made up from imperfect lists of them upon various defaced temple inscriptions, or casual allusions to them in biographical texts. It is true that lists of them, in Ptolemaic times, were to be found at Edfu and at Denderah, but then there was no certainty that these were identical with the nome names of more than 2,000 years earlier, or that in early times their number was 22. The inscription M. Moret edits is of a functionary named Shemăa who flourished under Neferkahor or his predecessor. He was governor of Southern Egypt, and in his honorary inscription appointing him governor, enumerates the nomes which came under his jurisdiction. He held several religious dignities as well.

M. Moret gives the Nome list as follows:—

I. Ta sti (Nubia or Elephantine). 2. Utes-Hor (Apollinopolis Magna. Edfu). 3. The Two Plumes (Nekhen. Eileithyapolis). 4. Uast, The Sceptre (Thebes). 5. The Two Falcons (Koptos). 6. Ad, The Crocodile (Denderah). 7. Seshesht, The Sistrum (Diospolis Parva). 8. Debt, The Shrine (Abydos. Thinis). 9. Min (Panopolis. Akmin). 10. Uazet, The Serpent (Aphroditopolis). 11. Set (Hypselis). 12. Du-aft, The Serpent Mountain (Hierakonpolis). 13. The Terebinth, Atf khenti (Lycopolis). 14. The Lower Terebinth, Atf pehut (Cusae). 15. Un, The Hare (Hermopolis). 16. Ma-hez, The Gazelle (Hibu). 17. Anpu, The Dog (Cynopolis). 18. Sep, The Bird (Hipponos). 19. Uabu, The Sceptre (Oxyrhynchos). 20. Nâr khenti, The Upper Rose Figtree (Heracleopolis). 21. Nâr pehut, The Lower Rose Figtree (Nilopolis). 22. The Knife, Demat (The Northern Aphroditopolis).

M. Moret adds some remarks upon the functions and office of the governor of Upper Egypt, pointing out by means of another inscription of about the same date, found at Coptos, that the Pharaohs appear to have provided another high official as a sort of superior over these southern viceroys, because they were so powerful that they often aspired to the throne. In fact, at the end of the VIIIth dynasty, the epoch of Shemăa's viziership, the Memphite race of Pharaohs was supplanted by a number of petty princes, of whom the chief families of Upper Egypt took the first rank. It may be noted that in this text there is no indication of Elephantine being the elephant nome, although Prof. Newberry thinks he has found that animal as a nome crest. Also, at the early period of the record, the nome

emblems do not consist more of animal effigies than in later times, so that the idea that all the nome signs were originally totems is not strengthened by the newly found inscription.

The hieroglyph for the Seventh Nome, whose deity was Hathor, in Shemăa's text is not a sistrum but the cow-head of the goddess, as it is in the Pyramid Texts.

It is now nearly five years since it was notified that the Cairo Museum had been enriched by the addition of several newly found fragments of the famous "Stele of Palermo." In the *Comptes Rendus* for last July M. Henri Gautier gives an account of these, with four sketches showing how much new material there is in comparison with the piece long preserved in Sicily. From this it is evident that quite as many lines of the inscription are still unpublished as were to be found upon the Palermo piece.

M. Gautier announces that he is editing the new texts in that most expensive of French Egyptological works the Musce Egyptien.

One of the newly discovered fragments is of a thicker piece of stone than the others, though certainly its inscription forms part of the same record of early annals. M. Gautier concludes from this that there were at least two monumental inscriptions, duplicates of each other. If so, the possibility of finding further portions of text is much increased.

In the *Comptes Rendus* for October, M. Moret writes another article affording much new light upon the subject of the bequeathing to descendants of estates, or emoluments, derivable from the royal bounty. The title for the remarks is, "Une Nouvelle Disposition Testamentaire de l'Ancien Empire Egyptien," and is founded upon an inscription discovered in the Necropolis at Gizeh, dating from the IVth dynasty.

Although of such high antiquity, the text is quite a lengthy one, and without lacunae. M. Moret is particularly prepared for explaining a deed of this description, because of his researches made in order to produce his work upon *Donations et Fondations* in Ancient Egypt.

In the present case a certain personage of position named Thenta, whose mother's name was Bebi, enjoyed, as inheritance from the said parent, two valuable donations from the Pharaoh. The first of these was a salary, or gift, from the "King's house," in the shape of grain and vestments. The second consisted of two "fields of offerings," that is to say, two pieces of land belonging to some temple and therefore sacred soil, or fields forming part of land assigned for the purpose of producing crops, or nourishing animals reserved for the sacrificial Pharaonic worship. In either case they would be surplus ground not needed for the object they were first reserved for, and so the king could hypothecate them for the benefit of some official or courtier.

The revenue in kind from the palace, as also the plots of land, had been bequeathed by Bebi to her son and heir, but subject to a charge to keep up her ancestral worship, that is to say, the annual or more frequent ritual ceremonies at her tomb. She had enjoyed the royal remuneration because she was a member of a special grade in the court hierarchy called *neb-amakhu*; a title also meaning that its bearer was an initiate into some of the more esoteric secrets of theology. The lady could endow her son with the same emoluments because he also had become, either by devotion and service, or perhaps by hereditary right, a *neb-amakhu* himself.

The Gizeh inscription, however, is not the deed of benefaction from mother to son, but the act of Thenta setting forth his disposition to his beneficiaries of the properties held, always, it must be borne in mind subject to the Pharaoh's good will. Thenta, in this will, or testament, divides the royal rent of cereals and clothing material, or it may be completed garments, into moieties, one for his spouse Tepemnefert, who could rightfully enjoy them because she also was *neb-amakhu*, the other to his brother Kemnefert, who was *hen-ka*, or professional priest of funerary worship.

This division of the annual payment from the palace was to assure the perpetual performance of the tomb ritual for Thenta and his revered mother Bebi. Thenta could have left the whole of it to his wife, and thus constituted her a hen-ka for his and his mother's grave-worship, but probably she was not well versed in the elaborate ritual of the Opening of the Mouth, and the meticulous preparation and serving of the mummy's offerings, and so Kemnefert, a practised hierophant in their ceremonial, was seized of the services.

The two fields, or rather their produce, were also assigned to the same couple; one to the good wife Tepemnefert, and the value annually derived from it was also to be expended for ancestor worship of Bebi and Thenta. Again, in this case, she was not personally to act as priestess, but was adjured to pay part of the annual product value to four *henu-ka*, who also were to receive three sacks of grain per annum, and some payment sufficing to provide incense or oblations for the services.

The value of the other plot went to the brother Kemnefert, also to repay him for carrying out duly the tomb services. That it might always adequately suffice for this purpose he was expressly forbidden to dispose of any portion of the annual income to anyone else. That is to say, he must not assign part of it for his own sepulchral cult, but it must ever be employed to keep up the worships for Bebi and Thenta. It is to be noticed that the wife is not so directed; but the wording of the deed in her case infers that she may use the remaining surplus for her own benefit, after giving certain salaries as specified to the four henu-ka.

Compared with previously known settlements of this character, this deed affords two novelties. Before, these funerary foundations had either been bequeathed to the family of the testator, who for the due carrying of them out became *henu-ka*, or funerary priests, or else they had been assigned to a professional *hen-ka*.

In this case the wife and brother receive part and the priests another portion under the same testamentary disposition.

Thenta's act of settlement also is singular in that he seems to have had no offspring or adopted children, hence the duties of funerary ritual are handed over to his wife and brother, secured by gifts of funds adequate for their performance.

Another essay, by M. Hippolyte Boussac, is written to prove the worship, in the first century of our era in Southern Italy, not only of Isis, but also the goddess Bast. He shows this by means of inscriptions from various parts of Italy, and refers also to one found at Scarbanica in ancient Pannonia, near the Danube. The Italian records often erroneously style the goddess Bubastis, using the name of the Egyptian city most celebrated for her cult. From Pompeii, M. Boussac produces a painting showing the figure of a priest of Egyptian style chanting from a papyrus text. He stands in front of a high pedestal, upon the summit of which is a cat, bearing the "Meh" symbol of Lower Egypt on its head. One of the inscriptions discovered at Nemi, enumerates robes and apparel presented to the goddess Bubastis, probably for adorning her statue.

At the October session of the Academy, M. Seymour de Ricci explained a Latin papyrus at Berlin, which formerly belonged to Brugsch Pasha. It is a last

will and testament of a certain M. Lucretius Clemens, and the date of the document corresponds to A.D. 131. For the first time, it affords us a Latin specimen of a will, per aes et libram, as fully described by Gaius. A Greek translation of a similar will, that of Gaius Longinus Castor, is to be found in the Berlin Griech. Urkunden No. 326.

M. Seymour de Ricci's rendering of the very much defaced writing will be of great interest to students of Roman law, as supplementing the material of the same origin given in M. Paul Fréderic Gerard's *Textes de Droit Romain*, Paris, 1913.

The following Latin inscription, which was discovered about two years ago, at Ventimiglia on the Italian Riviera, is published in the *Notizie degli Scavi*, 1914, Pt. II. It recounts the career of an officer and official named Bassus, who had been Epistrategus of two of the three Egyptian provinces:—

M(arci) filius Fal(erna) Bassus praefectus cohortis primae Antiochensium. Praefectus cohortis primae Brittonum; praefectus alae Moesicae. Procurator imperatoris Caesaris Traiani Hadriani Augusti, ad quadragesimam Galliarum; item ad censum agendum Ponto Bithyniae, epistratego Pelusio, item Thebaidis. Procurator provinciae Judaeae, testamento poni iussit.

It will be noticed that the gentilicum of Bassus is absent, which is because it has become effaced from the stone, and so is unknown; but many years ago a seal was found, also at Ventimiglia, bearing the name Aemilius Bassus. The biographical details in this inscription show that the career of the Bassus it commemorates was contemporary with most of the reign of Hadrian, which lasted from A.D. 117 to 138.

Two papyri that have been published from Oxyrhynchus mention an Epistrategus named Bassus. One is numbered in the collection of papyri from that site 726, and concerns Gellius Bassus. The other is No. 237, which is the famous Petition of Dionysia, and gives the title "Bassus" only. The first papyrus text is dated by the editors as A.D. 135, and they say that the mention of Bassus in the other manuscript concerns the year A.D. 128. As these papyri come from the Fayoum, it is probable that the Bassus and Gellius Bassus who appears in them was an Epistrategus of the Heptanomis, or seven-nomed central province; but some matters connected with the protracted litigation of Dionysia may have been connected with or conducted in other parts of Egypt. However, before A.D. 137, the Bassus of the Ventimiglia record was Procurator of Judea.

Two inscriptions revealed by the recent Italian excavations at Ostia refer to Egyptian prefects. One of these concerns M. Bassaeus Rufus, who also held the pretorian prefecture under Aurelius, L. Verus, and Commodus. The other name is that of Petronius Onoratus (or Honoratus), whose term of office in Egypt was A.D. 147 and 148. He is mentioned upon a wooden tablet in the Bodleian Library, as well as in published papyri.

The whole question of the Epistrateges is fully treated of, as far as papyri and inscriptions had provided documents concerning them up to 1911, by M. Victor Martin of Geneva, in a work entitled *Les Epistrateges*, published at Geneva in that year.

Another memorial of a Roman Egyptian official may be added here. It was first published by Mr. W. M. Calder, in the *Journal of Hellenic Studies* for 1913.

The Proculus it concerns was Juridicus Alexandriae et Aegypti.

SER · PROCVLO

II · VIR · AVGURI · TRIBUNUS

MILITUM LEGIO III CYRE

NAICA · IVRIDICO · A_E

XANDREAE · ET · AE

GYPTI · PROCURATOR

NERONIS claVDI

CAESARIS AVG GER

MANICI PROVIN

CIAE CAPPADOCI

AE · ET · CILICIAE

ALA AVG GERMANICA

HONORIS · CAUSA.

In the Bulletin de L'Institut Egyptien for 1914, M. R. Fourtan, in a paper entitled "La Côte de la Marmarique d'après les anciens Geographes Grecs," gives the result of his travels along the North African Coast, west of Alexandria, as to the identification of the sites upon the shore given in the Periplus of Scylax, and the fragments in the Geographi Graeci Minores of C. Muller.

Muller took for his topographical guide a British Admiralty Chart which was somewhat imperfect and was being succeeded by a new one embodying a more precise survey. His identifications are therefore liable to correction, and this has in some cases been carried out by M. Fourtan, who supplies a map of the coast giving all the modern Arabic names, adding those provided by Greek geographers. He is unable to fix the port of the ancient Egyptian city of Apis, but considers the temple to have been at the site of the Qasr, near Ras Oum Rokhan, west of Marsa Matrouh.

Since the decease of M. Eugene Revillout, who may be said to have been the only demotic savant in France, the continental publication of texts in that difficult script has been almost entirely left to Prof. Spiegelberg. Last year, however, M. Henri Sottas, in the *Journal Asiatique* (1914, pp. 141–174), commenced the editing and translation of some of the more legible demotic documents at Lille, and reproduced two of these in heliogravure; a fortunate proceeding, for after the Germans have dealt with that city, it is very improbable that any of the papyrus collection there will be spared for investigation.

In a modest preface M. Sottas disclaims any pretension of being a demotic expert, having only devoted a few months specially to that branch of Egyptology. But his notes show he is fully acquainted with the work of previous students, and his essay of more than thirty pages renders clear much of the contents of the manuscripts he describes, and incidentally illuminates several matters connected with Ptolemaic administration.

The texts, which are of legal character, are engrossed upon frail papyri, and are really duplicate deeds, something after the manner of Assyrian record tablets, or Latin military diplomas, having been written in duplicate upon the same piece of papyrus. The strip was then folded so that one copy of the text was inside, and thus protected from damage, whilst the shorter recension, or summarised copy, was readable without disturbing the document by unfolding it. Moreover, these and similar deeds were pierced by a small hole, through which a cord was passed, preventing the record being unfolded.

The deeds concern the giving of bail for a person who, unable to pay a loan or rent he had incurred, had become partly and temporarily the slave of his

creditor. To recover his freedom for a short period the debtor got a friend, or an official, who for a consideration would act as baillee, to be surety for him. The personages concerned appear to have been, some of them, in the semi-military police, others warders in a prison, and military agriculturalists, a class of settlers in Middle Egypt quite numerous in Ptolemaic times. In the case of native Egyptians they had already adopted Greek names in the time of Euergetes I, 245 B.C.

The texts illustrate the Greek titles of various officials, and the division of the Fayoum into three districts (or Merides), one of which, Themistes, is that in which the transactions recorded took place at the town of Sobek-Arsinoe.

The precise circumstances which produced these deeds are not quite clear to M. Sottas, who gives five different views as to what the situation of the personage obtaining surety really was. The first of these is the one suggested above.

The eighteenth volume of the *Sphinx* contains a series of articles more suitable for Egyptologists than for the general reader. It contains the last essays written by the late M. Amélineau; one of these, upon "Orthographe et Grammaire Coptes," is a little treatise. He also reviews "The Sermon upon Penitence attributed to St. Cyril of Alexandria," published by Père M. Chaîne, in Vol. 6 of the *Mélanges de la Faculté Orientale*, of St. Joseph's University at Beyrouth.

This sermon of St. Cyril, M. Amélineau proves to be a forgery, like so much Coptic Christian literature. As illustrating the vagaries of Coptic authors, he shows that the alleged letter of Pope Liberius to the Alexandrian clerics concerning the death of Athanasius is an impudent fraud, because the pope died seven years before the Saint. In the *Revue de l'Histoire des Religions* M. Amélineau has illustrated how Coptic Martyrologies are merely copies of one another, and quite unworthy of editorship.

M. Daressy reviews M. Henri Gautier's Geography of the Tenth Nome of Upper Egypt, correcting several of his conclusions. The matter, in Roman times, is rather complicated, because this nome was divided into three districts: Aphroditopolite. Antaeopolite and Apollonopolite; the old Egyptian titles for these subdivisions are unknown, if, indeed, they were recognised as in any sense separate in the Greek era, when the whole nome was called Aphroditopolite. M. Daressy utilises texts upon some coffins recently published by M. Lefébvre, showing how inscriptions, apparently of little value for historical or geographical purposes, yet are often very useful.

An interesting article by M. Autran concerns La Morale des Egyptiens, à propos d'un Livre recent de M. Baillet. M. Autran states that the last six of the Jewish Ten Commandments are identical with maxims for the conduct of a good man in the many versions of the so-called Negative Confession in the funerary inscriptions. Moreover, long before the time of Moses, the Egyptian precept of morality had preached a good will and human kindness more resembling the ideas of the New Testament than those of the old.

To have behaved as a husband to the widow; as a father to the little and the feeble; as an asylum for the orphan, and given clothes to those who were naked, is the boast of hundreds of Egyptians in these memoirs in the tombs. They doubtless often exaggerated their good deeds, but that they admitted they ought to have carried out such conduct is an interesting fact in the history of civilisation.

Alexandrea and Ægyptum is the title of the excellent guide which Dr. Breccia, Director of the Alexandria Museum, has prepared for the Municipality of that city as a description of the town, its museum, and antiquities.

In addition to the review in the last number, we may note that among many Greek inscriptions stored there, are several referring to Jewish residents. Also the famous military diploma, written upon wooden tablets, granting the rights appertaining to a veteran, to C. Valerius Quadratus, who had served at the Siege of Jerusalem.

Among the Greek papyri are eleven lines of Callimachus' fourth Delian Ode. Although the relics of Pharaonic Egypt are mostly kept at Cairo, the Alexandria Museum possesses a good many, including reliefs and sculptures from Dr. Breccia's recent excavations at the temple of the Crocodile-god Pnepheros, in the Fayoum. But the chief contents of the Museum are its Graeco-Roman Antiquities, including coins, in which the Collection is very rich. Among the sculptures is a colossal statue of Marcus Aurelius, and a masterly bust of a Roman lady. The statuettes and figurines are very numerous, and many of them are fine specimens. The vases also are well worthy of a visit, many of them being provided with a floral wreath in metal work, once gilded. The finest of the sarcophagi represents Ariadne in Naxos. Dr. Breccia reproduces one of the Roman mummy portraits and some of the Tanagra-style statuettes in colours, and also many of the most beautiful specimens of the coins.

The Guide contains detailed descriptions of the Great Catacombs at Kom-el-Shugafa and Anfouchy, and will enable any visitor interested in ancient civilisation and art to pass a very pleasant and profitable fortnight at Alexandria.

JOSEPH OFFORD.



THE GRENFELL COLLECTION OF SCARABS.

THE collection described and illustrated here was formed by the Rt. Hon. Field-Marshal Lord Grenfell, while commanding in Egypt. The photographs, I to 102, illustrate his scarabs; and the drawings, III-I46, are from examples in other collections which serve to explain these.

The following remarks will be useful in the intepretation of New Kingdom scarabs:—

- I. The verb is generally left out, especially with wish- or prayer-scarabs. Sometimes a "key" scarab, such as 130, supplies the missing word or words.
- 2. There is also a frequent omission of alphabetical hieroglyphs, syllabics, determinatives of proper names and most grammatical endings, either from want of room, or because the Egyptians were so familiar with the legends that the merest suggestion of them was enough to make them plain.
- 3. The signs may be reversed, or placed sideways, or doubled, to make them balance better.
- 4. The deceased is figured under various symbols. Those used on the scarabs mentioned in this article are:
 - (i) \int_0^{π} nofer, see 113 and 55. (See plates at end of article.)
 - (ii) $\frac{1}{2}$, "revered person," 128.
 - (iii) Horus-bird with Ra-sign and uraeus from the foot (often omitted), "glorified one," 26, 137.

 - (v) *ħes*, 139.
 - (vi) ∏ variant, hes, 87.

All these symbols are found on other antiquities; in the Abbott Papyrus in combination with ; on the marble amulet at Leiden Museum; in the Ani Papyrus; on the Ptolemaic sarcophagus of Pa-nehem-Isis.

(vii) , in its two forms, amakh, 94 and 96, is generally, not always, used of a deceased person.

"Hypotheses are nets; only he who throws them will catch anything."

In enumerating the contents of a whole collection of a hundred or more scarabs, several will be found uninteresting and unimportant; a few illegible; some incomprehensible, even if their signs can be read. They are often beautifully cut with meanders, scrolls, volutes and other spirals of different kinds, all of which doubtless had originally a symbolic meaning, now lost.

There seems some evidence to prove that the double spiral (III) and the single spiral signify "life." In an article on the Scarabs of Queen's College, Oxford, in the Journal of Egyptian Archaeology for October, 1915, I figured nine double spiral scarabs, 20–28. I then thought the double spiral was an amulet, since it is so frequently used—as other spirals are not—with the symbols for the dead. But on Scarab III, Fitzwilliam Museum, "Ra, the golden Onc, Lord of Life," and on II2, Mond Collection, the double and the single spiral seem to be substituted for $\frac{Q}{2}$ and to interchange with it. So it is possible that these spirals mean "life." We also find the substitution on Scarab II3, being the same in meaning as the original and much commoner design II4, both in the Blanchard Collection, "May Isis (give) a good life."

On 112 the spiral ends in a lotus bud, the well-known symbol for the "New Life."

On 113 the two spirals have a lotus flower between them, with the same signification. See also 28, which may mean "Establish (his, deceased's) life." The double spiral appears on the skirt of a Hittite Amazon, see P.S.B.A., Vol. XXXII, 1910.

That the fish means Isis there is ample evidence. We find Isis as a fish associated on scarabs with Bast, Neith and Serq, as we should expect. With Serq as a scorpion she is found on a scarab (115) in the British Museum, "May Isis and Serq watch over and love the lion of Thebes," = the king.

The remarkable bronze fish on a sledge now at Cairo Museum, 116 (Cemeteries of Abydos, II, xxxix), is a symbol of Isis, having the horns, disk and uraeus as worn by her. Berlin Museum has a similar fish. Compare this fish with the head of a figurine of Isis (117) belonging to Mr. Blanchard. But most remarkable of all is the decoration on an anthropoid coffin of Roman date (118), found by M. Smolenski at Gamhoud, and published by Ahmet Bey Kamal in the Annales du Service des Antiquités de l'Égypte, IX, 1908. It represents a mummy laid out on a bier and an oxyrhynchus fish hovering over it, replacing the usual Ba-bird. I am not aware of the fish ever symbolising the soul. This fish is probably Isis. Her worship was spread over the civilised world at the date of this coffin.

The fish was the earliest symbol used for Christ. There seems to have been a mingling of pagan and Christian symbols at first, and no reluctance was shown to use a pagan setting. Christ is called "The scarabaeus of God." There were also Christian mummies.

The fish sometimes is an emblem of fertility.

The feathering of the legs of the beetle, 10 (photograph), is not later than the XIIIth dynasty. II to 15 are of the XVth dynasty. The Hyksos formula Ra-n-Ra, "Ra proceeding from Ra," is shown on 13, 14, 15. This formula is repeated occasionally on scarabs of a later date, see 33 and 46, of the XIXth dynasty. There is an almost similar scarab to 46 in the Bootle Museum, and also one in the Athens Museum, but these two latter have not got the curious object seen at the top and bottom of 46.

Of royal scarabs of the XVIIIth dynasty, 16 is Aahmes I, first king of that dynasty, "Neb-pehti-Ra, ruler of Egypt"; 17 is "The Royal Wife Nefertari," his queen. Her scarabs are common.

18 is Thothmes I (?) as a lion over a captive.

19, 20, 21, 22 are some of the common Men-kheper-Ra (Thothmes III) scarabs, the largest class of all, and the most uninteresting.

23 is Amenhetep II, Aa-kheperu-Ra.

24 and 25 may be called "circling scarabs." Both are rather faulty specimens. The design is more carefully given on 119 (at Alnwick Castle) "Let not the heart (of deceased) be destroyed by the judge, but may he circle round the temple of Amen Ra." The heart was considered the part of a man which sinned, therefore judgment was passed on it. The hieroglyph for "judge" is , ap, the two horns, used here with the determinative of a seated figure. Thoth is called ap rehui, seed here with the determinative of a seated figure. Thoth is called ap rehui, is an uncommon hieroglyph of a bird with a drooping head and a very long neck. It is not given in the sign-lists of the Grammars of Erman, Brugsch and Farina, but it is given in those of Loret and Budge. The latter part of 24 and 25 is clear enough. Dr. Budge in The Liturgy of Funerary Offerings, 1909, writes: "It is known from many texts that souls (kau) journeyed from one great sanctuary to another in Egypt, and that they assisted at all the great national festivals, and expected to receive their due share of the offerings which were brought to the altars."

A second variety of circling scarabs is 120 in the Blanchard Collection, which figures the ka as well as the ab "circling round."

The MacGregor Collection has a third variety, 121, "In his worship may he circle round the roads of Bubastis." [The ape is a symbol of worship.] There is yet a fourth kind of circling scarab, 122 (British Museum), which has the word \bigcap_{Λ} , kedi, "go round in a circle," with the two legs for a determinative. "May Amen Ra the lord, king of the gods, arrive, and circle round (the heavens) and make the breath (of life) for those above (the earth)." Circling scarabs are all rare except the first variety.

26 is a plaque of Serq with the determinative of a goddess. Apparently she is protecting a Glorified One, though the Ra-sign and the uraeus from the bird's foot do not appear. But so much is not written out on scarabs, which was too familiar to the Egyptians to need repetition, that it makes many puzzles for us who are not so well equipped. The reverse of this plaque has two scorpions. Serq is frequently doubled, probably to fill up the space. On Scarab 123 (Liverpool Museum) she is guarding the king, figured as a lion. On 124 (Eton College) she is found with Isis figured as a fish. I have already alluded to Serq's appearance on Scarab 115.

29 is the usual pattern having its origin in the head of Hat-hor, which is common on scarabs

38 is the king (or Amen) as a sphinx, guarding hes (deceased) [ruling] over North and South Egypt, which country is symbolised by a lotus and a papyrus plant.

40 is "May Ptah, Lord of the beautiful face, give strength " , her, is used here in its original meaning of "face," though it is more common as a preposition. On a plaque in the British Museum (125) we read: "Ptah of beautiful face." or sometimes means the god Hor, or Horus, as in 136. It is a very common ingredient in private names, as Hor-du, Hor-y, Hor-men, etc.

41, "Ra the only strength," is a boat scarab. Several of these are common, and form a large class of thirty or more varieties.

42, "Ra stands firm; Do not fear."

43, 44, 45, are scarabs representing Thoth as a cynocephalous ape. On 43 he is in company with Khonsu guarding $\sqrt{}$. On 44 and 45 he is "Lord of Maat," that is of the life of the Au-dela, which by his magic words, ceremonies, etc., he brings about for the deceased.

XXVth dynasty. 79, both in photographs and drawings, has Thoth as an ibis. This ibis resembles the gnostic form of Thoth figured with the caduceus of Hermes, 126 (Biella Museum).

48 is an interesting "Fluttering Power" scarab; "May Ra (give) \(\sim\) this (man) the fluttering power, to wander unceasingly over his domain in the next world," as described in the inscription on the stele of Nekht-Amsu, or Nekht-Min, see Dr. Budge's Egyptian Reading-Book, 1906. A most remarkable and unique scarab, published by Prof. Newberry on Pl. XL, 31, in Scarabs, 1909, has this inscription, slightly shortened, on it. I have noticed this scarab in an article in the Recueil, Vol. XXX, 1908, "Amuletic Scarabs for the Deceased," and figured it with five other rare fluttering power scarabs. One of the commoner varieties is 127, "May Horus (give) him the fluttering power like " word omitted.

Prof. Sethe has given the clue to the meaning of the high white crown (), hez, of Upper Egypt on some of these scarabs in the Report on Some Excavations in the Theban Necropolis, 1908, in the chapter supplied by him "Die aenigmatischen Inschriften." In this report the text of a Hymn to Amen is published, written in this enigmatic script, where () is given as the equivalent of (), absolute pronoun, 3rd pers. sing., "he" or "him." As Osiris nearly always wears this crown, and the beatified deceased became an Osiris at death, it seems a very suitable hieroglyph to choose for him.

On a scarab (128) in the John Ward Collection, instead of $\sqrt{\ }$, the deceased is figured as a revered person seated.

A fourth variety (Louvre Museum) is 129, "May there be (for deceased) the fluttering power like " The word after \oint is elided in these last three examples, see the remarks in Brugsch's Grammar, p. 105, under \oint : "After this word the elision of a noun is a general rule in all phrases of reciprocal comparison." Therefore we must supply a noun, and here it is "gods," "may there be the fluttering power (for deceased) like the gods."

In fact, there is a "key" scarab (130) in the Catalogue of the Fraser Collection, 1900, slightly broken, but not enough to make the design illegible, which, fully written out, runs: "May he be provided with the fluttering power like the gods."

A scarab (131) in the Mond Collection has the hez sign used in the same way: "May he (deceased) see Ra." The same signs arranged differently are found on a scarab, 132 (drawing), formerly in the Meux Collection. To "see Ra" was one of the rewards of the righteous, and as man's psychic nature remains the same through the ages, Tennyson, in his last poem, "Crossing the Bar," has the same wish.

The Grenfell Collection includes three Ta-urt, or Thoueris scarabs, 49, 63, 64—the two latter XXVth dynasty—and a Thoueris plaque, 93, XXVIth dynasty. The fourth Thoueris scarab, 133 and 49 (copied among the scarabs drawn, as it is so indistinct), shows a lotus symbolic of onkh, instead of the more usual $\sqrt[6]{\frac{1}{3}}$, sa onkh, "fluid of life," so frequently prayed for on scarabs by deceased. Thoueris has a knife in her hand on 63, 64, and on 133, to cut down the enemies of the deceased. On a beautifully incised scarab in Queen's College, Oxford, she has a second knife tied on to her foot.

The lotus used for $\frac{Q}{I}$ also appears on scarab 134 in Stuttgart Museum, "May there be (for deceased) life with Thoth!" A verb is suppressed on Scarab 135, "May Thoth (give) life with Ra!" The verb is given on 136, "May Horus give him life" (Grant Bey Collection).

54 is a chariot scarab. The horse is better shaped than usual.

55 is a *nofer* protected by six concentric amuletic rings. 56 is of the Apis signs type of scarab, though it is a contracted example not giving all the signs. Vienna Museum and Queen's College, Oxford, have the perfect set, namely, a winged disk, a hawk with outspread wings, and a beetle with expanded wings, here evidently referring to the flight of the soul after death.

M. Naville mentions the fransformations, in La Litanie du Soleil. An analogous scarab (137) in the Hood Collection has "May the glorified (have) transformations." Liverpool Museum has a scarab, 138 (drawing), "May Ra give deceased transformations." It has the rare expression for deceased, found in the Papyrus of Ani, and on a few other scarabs. The British Museum has a plaque (139), "May some goddess (?) give transformations to deceased." The latter is figured under the sign. The two dots represent the plural, usually suppressed. The middle dot is omitted as it would interfere with the sign; and an absolute rule on scarabs is that no sign should ever touch another sign. This makes for clearness very decidedly. Of course there are a few composite signs to which this rule does not apply, but they are rare.

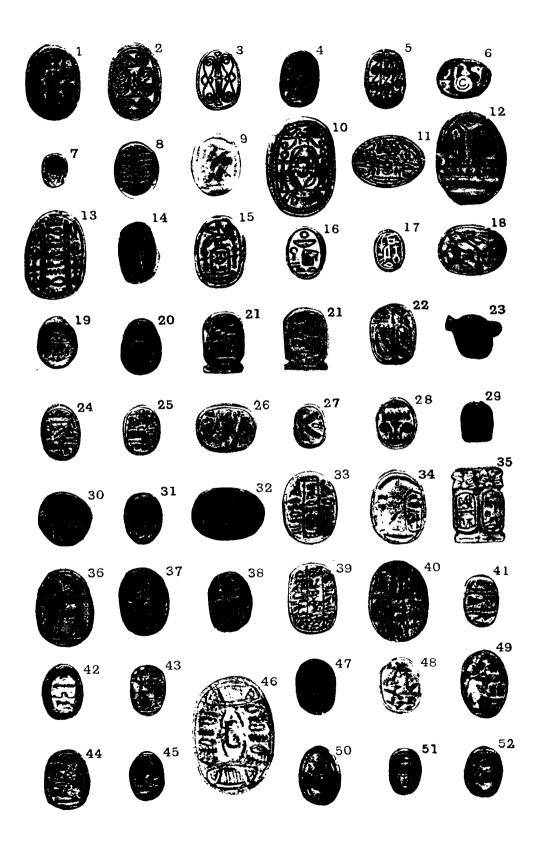
60 has a tied lotus: an unexplained amulet (?).

65, XXVth dynasty, has a Bennu-bird, flanked by two uraei. The remarkable point is that the uraei are not heraldically placed as usual. This peculiarity also occurs on a scarab (140) formerly in the Hilton Price Collection, where the name "Unn" is written. Whether 65 is a name "Bennu," I could not say. The Egyptians frequently gave the ophorous names to their children, but I have not come across Bennu as a personal name.

68 (plaque) and 69 (scarab) have the usual arrangement of Bes worshipped by apes. 70 has Bes grasping serpents, also a well-known design.

71 shows a man holding out two goats.

75 has "May Bast give good things."



The Grenfell Collection has a few private persons' names, besides the possible one, 65. 81 is a private name, Sebek-sa. Lieblein gives an example from a stele at Vienna.

84 is the well-known scarab of "Prince Pa-ma (the lion), hereditary mayor, priest of Osiris, lord of Dedu."

89 is the scarab of a with "suten-rekh, royal relative, Pa-fet-pet, deceased." Lieblein gives a somewhat similar name, P-f-pet-neter-ra, on a statuette in the Hermitage, Petrograd.

94: "The deceased amakh, Nef," , with the determinative of a woman, occurs on a stele in the Florence Museum.

The Grenfell Collection also has a plaque (141) with the name Unnef on it. In the Boston Fine Art Institute, U.S.A., we get the full name \$\frac{1}{2}\infty\$, Unnofer, 142. So there were three contractions of this favourite name of Unnofer; namely, Unn 140, Nef 94, and Unnef 141. In its Greek form of Onnophris, Όννῶφρις, it was a common Egyptian name in the Graeco-Roman period. There is a church in Rome dedicated to Sant' Onofrio.

91, a lion with Ra-sign above, is a title placed above the name of the king, and used in the XXVth and XXVIth dynasties. There is a lion on a scarab of Shabaka, 143, and on one of Taharqa, 144, both in the Cairo Museum; also one on a scarab of Psamtek I, published in Petric's History of Egypt. 92 also has this lion and the hieroglyph khent (literally "in front of"), here with the meaning of ruling over (Egypt). 95 is also a title "The Great One of Five," signifying the High Priest of Hermopolis. Scarabs with titles only on them, without names or other signs, are rare. The Fitzwilliam Museum has one, \$\int\infty\$; the Bower Collection has \$\infty\$; the Wiedemann Collection has \$\infty\$.

97 may be a modern cutting, "Amen Ra the Lord," on a XIIth (?) dynasty scarab.

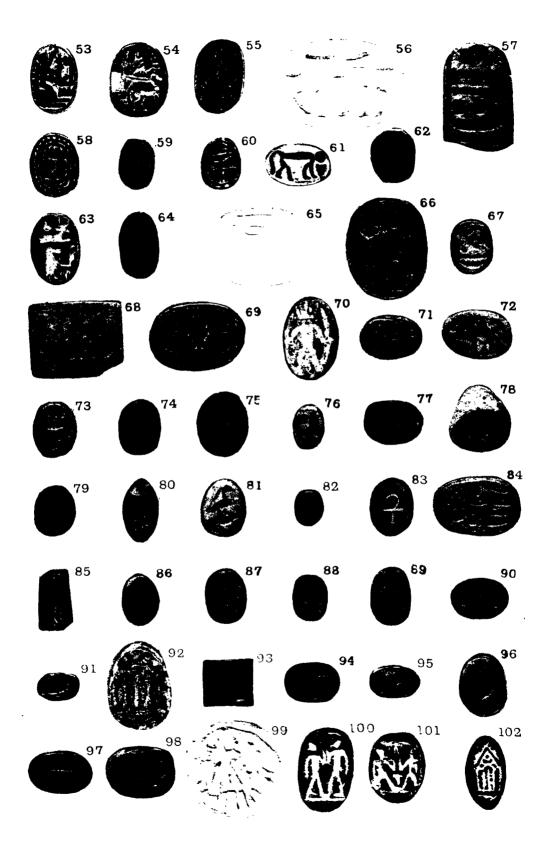
99 and also 78 are conical seals, exceedingly rough and primitive in design; 99 has a divinity on the back of a quadruped with a worshipper.

100 and 101 seem allied to each other. The object between the two men on 102 is apparently an upright lotus. Dorow and Klaproth in *Antiquités Égyptiennes*, No. 1389, figure similar deities (?), with the same object (?) between them (146).

102 is possibly a temple, but not of Egyptian style.

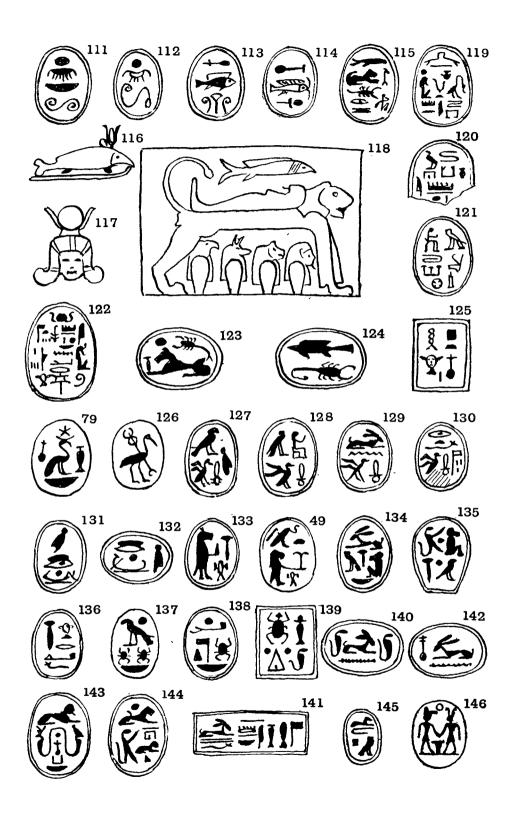
ALICE GRENFELL.

A few notes may be added on the dates of these scarabs. I has the two nefer signs for Ra, often found in the XIIth dynasty; it reads thus Ra-kheper-ka-kho, apparently a double reading of Senusert II with the ka added of Senusert I. 2 to 4 are also of the XIIth dynasty. 5 is probably of the Hyksos age, and 11 is of the style of Apepa II. 21 has the title Mery-ra. 22 is very unusual; Tahutmes has the title em zo mãot, "with the sceptre of right," probably a reflection on Hotshepsut. The reverse is "beloved of Sebek, lord of Sun," an inscription common enough in the XIIth dynasty, but unusual later. 23 has the crowned uraei of South and North, which are unusual at so early a date. The plant on 28 should be compared with 113. 32 is a scarab of Tahutmes III, made by Sety I. 35 to 38 are probably of



Ramessu II. 53 is of Ramessu III; and 54 is probably of the same by the maot before the king. 68, 69 are of the XXIIIrd dynasty, and 71 of the XXVth. 87 by the sphinx holding a hes vase is of Men-kheper-ra of the XXVth; as also are 88 and 89, the latter having the name on the other side. 90 is of Menkara, vassal of Shabaka. On 91, 92, 144, the Ra and Lion are of Psamthek, as a vassal of Taharqa. 100, 101, 146 appear to be all alliance scarabs: on 101 and 146 the two figures are swearing alliance over an altar, with the sun as witness above. So far as the detail can be estimated in the drawing it looks as if one figure wore the Hittite tall cap, and the other the Egyptian double crown. 116, the disc and horns are the usual headdress of the sacred Oxyrhynkhos; of the dozen goddesses with this headdress, Hathor seems to be the one in question, see figure from Great Oasis, Wilkinson, M. and C., Fig. 584. 141 is one of the foundation deposits of the Highpriest Nebunnef from Ourneh (see Qurneh, xxxiii, Memphis II, xxvi, 4), under Ramessu II. The readings which are of various degrees of probability, suggested by Mrs. Grenfell, were noticed in the last number of this Journal, p. 185, and will have to be taken into consideration in any future study of such scarabs.

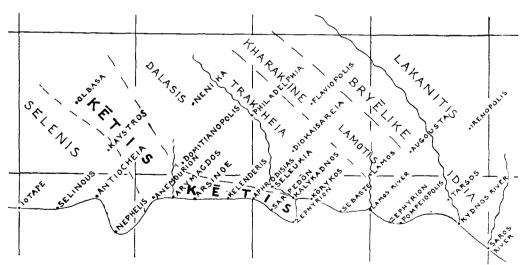
W. M. F. P.



THE END OF THE HITTITES.

AFTER the close of the Egyptian contact with the Kheta in 1194 B.C. under Ramessu III, we gain no further literary evidence on the Egyptian side. In the Book of Kings there are references to Hittites under David and Solomon, and the last living allusion seems to be under Jehoram, when the Syrians besieging Samaria, about 892 B.C., supposed that the Hittites and Egyptians were coming to attack them. The mention of Hittites in Ezra is an archaistic recital of the heathens of Palestine (ix, 1), and in Nehemiah (ix, 8), only an historical allusion to the past. Thus from literary sources we lose sight of the Hittites in Syria about 900 B.C. This is about the middle of the earlier Iron Age of the Hittites, see Ancient Egypt, 1914, p. 173.

At about this point we find them in Western literature in the Odyssey. This was recognised some forty years ago by the late Basil Cooper, as stated in an unpublished paper of his, which his daughter, Miss Cooper, has kindly placed in my hands with his books. In the discourse of Odysseus with Alkinous (Od., XI, 521), he says: "But [I will relate] how he (Neoptolemos) slew the hero Eurypylos son of Telephos with the bronze (sword), and many Kētean companions were slain around him." The scholiast states that the Kēteans were a people of Mysia. No trace of such a name of people is otherwise found in Mysia and Western Asia Minor. As the leader was son of Alkinous it is unlikely that he would draw on a race far east of Troy for his companions. Probably we should see in these a mercenary troop of Khita soldiers. Strabo could not clear up the passage (XIII, i, 69), but he asserts (70) that there is a small torrent which joins an affluent of the Kaikos, named Ketaion. He refers again to these Kēteans in XIII, iii, 2, XIV, v, 23, 28, without any further information. Perhaps this outpost of Khita gave their name to the torrent which flowed from their stronghold in the mountains.



THE SOUTH-WEST COAST OF CILICIA, ACCORDING TO PTOLEMY'S GEOGRAPHY.

Later we touch a much more definite location of Kēteans in the first century A.D., when Ptolemy describes a district of Kilikia called Kētis. In the accompanying map the positions of districts and cities are shown as Ptolemy describes them.

Evidently he did not know of the northward trend of the coast into the gulf of the Kydnos. Otherwise the formation agrees closely with the truth; the diagonal trend of the river Kalykadnos, and the mountain ranges, rule the divisions of the country. The extent of the districts is shown by the positions of cities named in the districts. The names of these districts are written here parallel to the rivers, and the other divisions shown by broken lines; the names of the cities are at right angles. From Domitianopolis being in Dalasis, Kētis cannot extend more to the north-east; and from Kaystros being in Selenis, it could not be further south-west. Thus Kētis is limited to a strip along the coast from Seleukia westward to the valley of the Arymagdos, a region of about eighty miles of coast and twenty miles inland, exactly opposite the nearest coast of Cyprus. As we know that the Hittite power formerly covered this region, there seems no reason to question the continuance of the name here down to Roman times. Whether we may also see in Kition, on the opposite shores of Cyprus, another vestige of Hittite influence is doubtful, as they do not seem to have had any sea power.

W. M. FLINDERS PETRIE.

PERIODICALS.

Annales du Service des Antiquités de l'Égypt. Tome XIV. Cairo, 1914.

DUCROS, HIPPOLYTE A.—L'Arbre Ash des Anciens Égyptiens. It is shown that names alone are not conclusive as to plants; various modern Egyptian words are applied to two different plants, and names are misunderstood. The names that are known will not at all cover all the varieties of wood that are actually found wrought. A surprising result of the examination of ancient wood, is that yew was commonly known to the Egyptians, and used for coffins; unfortunately no dates are given by which the period of this extent of trade could be estimated.

Ash was usually considered to be cedar; but on the strength of the determinative in one case being a long pod of seeds, M. Loret claimed that it was the Acacia seyal. This M. Ducros rebuts by showing that there are eight different forms of determinative, only one of which is the pod. These are probably corruptions of one form which is supposed to have been that of a rough log of timber. M. Ducros then takes as a determining description that the heart of Bata was placed on the top of the flower of the ash tree. The small red capsule of the yew, and the berry in it, is quoted as likely to be the origin of the idea of the heart of Such is M. Ducros' conclusion. The idea, however, is not that the heart of Bata became the flower of the ash, but that it was placed upon it. When we look to more practical evidence it seems impossible for the ash to have been the yew. It was the usual wood for the best shipbuilding, and in the time of Sneferu a ship of one hundred and eighty feet long was built of ash wood; it seems impossible to suppose a ship of this size being built of such slender wood as the yew. That it came from Syria is certain, as ash from the mountains of Retennu is mentioned on the stele of Amenhetep III (Six Temples, 1. 17). That the wood produced an oil is certain, as ash is one of the seven sacred oils. We require to find then a tree of large growth, fairly abundant, producing an oil, and growing in Syria. The cedar seems to fit all these requirements; the cypress or pine might be possible, but the acacia or yew cannot be accepted. The early form of the determinative (Palermo Stone) is a log with short side twigs, the same as used for mer wood.

LEGRAIN, GEORGES.—Au Pylône d'Harmhabi à Karnak. The clearing up of Karnak has reached the well-known Pylon X, the history of which has been fairly worked out. By the great colossus of Amenhetep III being placed on the south face, it seems that the foundation of it must be due to him. That the colossus was put in place before the pylon was built is likely enough. From the Ramesside description we know that a long earth slope was required to raise a colossus, and then it was tilted upright over the end. In doing this a pylon would be an extreme encumbrance on the ground; so we may take it as a rule that colossal figures had to be put in place before building a pylon behind them. The building on the foundation was of course suspended by Akhenaten; but it

was resumed by Tutonkhamen or Ay, who used up the buildings of Akhenaten for material. After that it was carved by Heremheb. The fellow statue to the colossus only has cartouches by Heremheb, but it may have been made by Amenhetep III. On the north face are two statues; on the base of one is the effaced name of Queen Nezem-mut, so these are due to Heremheb. The figures, however, are of Ramessu II.

On the inside of the gateway is an inscription about making monuments, due probably to Heremheb; the cartouche has been usurped by Psamthek. The lower part of a reconstruction of the pylon entrance in sandstone has been found on the south side. The inscription on this new portal states that it was erected under Padabastet (826–786 B.C.) by the governor Pashedbastet, son of Sheshenq II (born about 854 B.C.). He states that "he made a great gate of sandstone after he found it going" (to ruin), or "far from" (completion). This implies that the pylon had begun to fall to pieces before 800 B.C. This is strangely connected by M. Legrain with "ce raid de Carthaginois qu' Ammien Marcellin (XVII, 4) reporte aux débuts du règne de Padoubastit." Now Carthage was only founded about a generation before this restoration, and Ammianus only states that the Carthaginians once took Thebes, without a hint of the date or any allusion to Petubastes. The pylon is very unstable in construction, being merely a shell of blocks, filled with loose stones which press the walls out. The damage to such a building was probably due to earthquake, rather than to a raid of enemies.

By far the most important result of the clearing was finding two pairs of figures seated cross-legged, of Amenhetep son of Hapi, and of Paramessu. It was known how in late times Amenhetep was worshipped in the temple of Deir el-Bahri, but his contemporary figures here show how his sacred position was established during his life. On the base of his figure is the address: "Oh people of Karnak. desirous of seeing Amen, come to me, I will make known to him your prayers. I am intercessor of this god; Nibmuria has placed me to repeat the words of the two lands; make to me the nesut da hetep, invoke my name continually as you do to a favoured one," or "to the dead." The other figure is equally explicit: "Oh south and north, do all who see the Aten, who go up the Nile to Thebes to beseech the Master of the Gods, come to me. I will pass on your words to Amen of Karnak if you make to me nesut da hetep. Make to me a libation of what you carry. Me, I am intercessor placed by the king to hear your words of prayer, to transmit on high the needs of the two lands." These are documents of the greatest import in the religious history, showing a definite intermediary between the worshipper and the god, and that this person might be a subject who was not even a priest. The statement of his having been appointed by Amenhetep III to this function, suggests that it was a royal function deputed by the king to his subject. Yet the position of Amenhetep was essentially civil rather than religious. He was registrar and organiser of the army, head of police, organiser of public works and chief architect, instructor in the temple of Amen, regulating the priesthood, directing the feasts of Amen, and performing daily sacrifice, though not a priest These inscriptions, showing the saintly position of Amenhetep, exactly agree with the Manethonic quotation by Josephus that "Amenophis son of Paapis was one that seemed to partake of a divine nature, both as to wisdom, and the knowledge of future things."

The figures of Paramessu are also important. They were certainly made under Heremheb, as his name is on the breast and right shoulder. He was chief of archers, keeper of the cavalry, keeper of the citadel, keeper of the mouths of the

Nile, ambassador, marshal of the police, President of the Council, chief of the prophets of all the gods (ecclesiastical commissioner), vizier, lieutenant of the king in the south and north, Dux (repoti) in all the land. These titles are parallel to the important position of Heremheb before he was king, and the last title is only known otherwise in his case. If a noble wielded the whole viceregal power of the land thus under Heremheb, it is not likely that he would yield up his power on the king's death. It seems then that this Paramessu dropped the article before his name and became Ramessu I, the founder of the XIXth dynasty. Further, his father was named Sety, and the son of Ramessu I was named Sety. It seems then that we have, stated here, the rise to power of the founder of the XIXth dynasty.

Another question is whether the Vizier Rames, whose tomb is the finest at Qurneh, was the same man as the vizier of Heremheb. Rames carved his chapel in the early years of Akhenaten, about 1380 B.C., and appears to have died then, as the chapel was finished by a relative. Hence he could not be the later vizier who succeeded to the throne in 1328 B.C. The reason assigned for the difference by M. Legrain, that the father of Rames was Neby, and that of Paramessu was Sety is not conclusive, as Sety might be politely called Nuby to avoid the unorthodox name, just as King Sety is called Asary in his tomb.

AHMED BEY KAMAL.—Rapport sur les fouilles exécutées dans la zone comprise entre Déirout au Nord et Déir el-Ganadlah, au Sud. This account resumes a previous notice of excavation at Meyr. Each coffin found is transcribed, lists are given of boats and other funeral objects, but there is no trace of the archaeological necessity of recording groups, there is nothing said but what could be seen by looking at the plunder in a museum. At Deir Rifeh work was carried on similarly, devoid of all archaeological value; the remark is prefixed "Malheureusement, cette region, . . . a été presque entrement épuisée." Happily, it had been excavated, with a record and publication of the groups of objects, by the British School (Gizeh and Rifeh), and so there was less left for the senseless plundering carried on under the Museum supervision. A list of fifty-two objects is given, worthless for archaeological purposes, which have unhappily fallen under the ravages of these excavations. How Meyr has suffered under official treatment has been well stated by Mr. Blackman (Rock Tombs of Meir, I, 14-16).

MACKAY, ERNEST.—Report of the Excavations . . . by Robert Mond, Esq. This paper gives a list of thirty-seven painted tombs of Thebes, which have been put in safe condition by Mr. Mackay. This most necessary work of conservation and publication, which was neglected alike by the Government and foreign societies, has now happily been put in good train by the generosity of Mr. Mond. The abilities and zeal of Mr. Mackay could not be better used than in the much-needed work of putting the cemetery of Thebes into safe order, after thousands of years of ravaging by seekers for gold and for saleable antiquities.

MASPERO, GASTON.—Chansons Populaires recueillies dans la Haute-Égypte. Two-thirds of the annual volume are occupied by this publication of the store of Arab songs collected in the last fifteen years, by the care of the Director. As there is no list of contents, or statement of the arrangement, we may say that they are classed as: Marriage Songs (p. 101), Circumcision (127), Funereal (131), Workers on Excavations (172), Shaduf Songs (185), Camel-drivers (211), Field-

workers (220), Ass-drivers (233), and Songs of Daily Life (245). Each song was written down in Arabic by a Syrian secretary, and is here given in Arab characters, transliterated, and translated. This incessant play of thought and word around the affairs of life is entirely foreign to the modern westerner; it belongs to a leisured sense of being, in which mere sustenance, and not striving, is the framework of existence, and on this there is room for the embroidery of fancy. The connection of thought in many of the songs escapes us, they seem mere detached phrases, especially the Shaduf and Saqieh songs; sometimes they revert alternately to two different themes, at other times the thread escapes our materialistic sense. The leader-and-chorus songs are often frankly nonsense lines, depending only on rhyme. A good leader will improvise line after line with reference to people and affairs around, and fitting to the uniform chorus. This collection was very desirable, though its connection with antiquities seems to be mostly in the collectors rather than the material.

Tome XV, Fasc. i, ii.

DE BISSING, BARON FR. W.—Les Tombeaux d'Assouan. Fourteen pages here add one more to the scattered and incomplete accounts of this important cemetery. Descriptions and printed lists can never be a substitute for clear plates of the whole tomb, which are required for all the inscribed tombs of the country. The present paper on the tombs of Mekhu and Sabne is intended as the first of a series; let us hope that, if the present troubles permit its completion, continuous facsimile plates will be used for the rest.

CLÉDAT, JEAN.—Fouilles à Cheikh Zouède. Along the coast road from Egypt to Syria a series of forts were built during the great settlement of the Roman Empire under Trajan and Hadrian. The coins found in these posts range from Antoninus to Constantine II; apparently the protection was abandoned by the middle of the fourth century, perhaps in favour of paying Arab tribes blackmail as auxiliaries. These forts were all built on sand dunes, so that each was within sight of those adjacent. Such a position shows that the place of the dunes is permanent; for had they shifted appreciably, the forts would have been destroyed in the course of fifteen centuries. The tomb of a Muslim saint, Sheykh Zoweydeh. gives its name to a district, and to the Roman fort near it. The position is not exactly stated, but it is between El-Arish and Rafah, and about nine miles from Turkish territory. Several rooms and houses were cleared of sand, and the principal discovery was that of a large mosaic pavement, 10 feet by 15. figures are clumsy, apparently of the age of Constantine. The upper scene is of Phaedra sitting in a porch, with pillars on either side, and curtains; she is resting her head on her hand, and looking anxiously after her nurse, delivering tablets to Hippolytos, who stands accompanied by two huntsmen. The lower scene is the triumph of Dionysos in a car drawn by centaurs, preceded by Silenus on an ass, a satyr and a maenad dancing. Below this is Herakles, two other satyrs and a maenad. An inscription in praise of the work comes at the bottom. is a sad example of decadence, but is in perfect condition. It is shown in three excellent photographs, embracing the whole width of it without any distortion. It is not stated to have been removed, or covered again to protect it. Two marble statues of Aphrodite, 31 feet high, were found in fragments, and are photographed as restored. They appear so good that they might well be a century earlier than the settlement of the place under Hadrian.

The baths were found, and the system of heating is described. Also a mound faced with slopes of brickwork, 30 feet by 20 below, and 24 feet by 14 at the top, with a flight of steps ascending it. Its purpose is unexplained; for the steps, being only 2 feet wide, could not lead to a temple or public building. The cemetery contained for the most part simple graves in the sand, sometimes lined or covered with slabs of stone. For the richer class there was a mausoleum with steps descending to groups of loculi, covered over by a high dome. A series of six leaden weights seem to belong to the double of the Palestinian standard of 177 grains (11½ grm.). Many stamped handles of wine jars point to a pre-Roman date; but as amphorae were largely used for foundations here, they may have been imported from an earlier place, and the handles knocked off before they were buried. Otherwise the rise of the settlement here must be dated in Ptolemaic times.

Smolenski, Tadeusz.—Les peuples Septentrionaux de la Mer sous Ramsés II et Minéphtah. This long paper, by the late librarian of the Cairo Museum, collects together the various opinions of writers on the subject, and is more a history of opinion than an addition to our knowledge. It may be useful to future students to have such a bibliography; but where occasionally an opinion is expressed the writer does not seem familiar with comparative study of names. It is not possible to come to conclusions without taking in the campaigns of Ramessu III, as the invasion of his fifth year appears to have been solely of westerners; and, as such, it is linked with the western invasion under Merneptah. It is unlikely that a combination of peoples of Algier with those of Asia Minor should have occurred, when the whole invasion was from the west. Those who cling to the immature guesses about Ilion and Achaians would do well to keep the campaigns clearly apart, and to consider the separate course of each movement. The writer states that he looks on it as quite absurd to connect the name Agbia with El Aghwat, because the latter means the Turks, and could not therefore descend from an ancient name. He does not seem to know how readily names are accommodated in popular use, as in England we have the dene-holes or caves commonly altered to Dane holes, and said to be the work of the Danes.

DARESSY, GEORGES.—Cylindre on Bronze de l'Ancien Empire. This cylinder of bronze (or rather copper?) was found at Memphis. It bears the falcon-name Sekhem-khou; and by an impression of another cylinder the Ra-temple of this king is known to be named Ast-ab, which fixes him as Nefer-ar-ka-ra of the Vth dynasty. A list is then given of the falcon-names, cartouches, pyramid-names and Ra-temple names throughout the Vth dynasty. Lastly, M. Daressy concludes "The accord of the monuments with the list of Africanus is therefore as satisfactory as possible for this period."

EDGAR, C. C.—A Building of Merenptah at Mit Rahmeh. This is an account of the uncovering by natives of part of the temple already excavated by the British School. The interest of it lies in the stonework being inlaid with coloured glaze; this is intermediate between the examples of such work by Akhenaten and by Ramessu III. It seems extraordinary that no hint of this discovery was given to the British School at that time working at Lahun, although Mr. Edgar expresses a wish to see the whole building worked out. On the contrary, our letter of enquiry

sent to the Museum regarding the excavations at Memphis was left unanswered. It is only after the Department gave the site to the Philadelphia Museum, that the British School is allowed to know, by publications, what has been done with a building already worked by the School.

EDGAR, C. C.—Some Greek Inscriptions. These eleven inscriptions are nearly all of the Roman period, and are not of importance.

LEFEBURE, GUSTAVE.—Égrpte Chrétienne. Thirty-two Coptic and Greek grave-stones, nearly all from Antinoe, are here published. One bears a fixed date, of the end of December A.D. 620, and the whole group from Antinoe probably belong to the generation before the Arab conquest. One from Deir el-Moharraq is dated in A.D. 747. It would be desirable to have photographs of all dated grave-stones for comparison of style; that of A.D. 620 appears in the plates.

DARESSY, GEORGES.—Trois stiles de la période Bubastite. These steles are: (1) of Usarken II, a gift of land, found at Shurafa; (2) of Sheshenq IV, a gift of land, at Bubastis; (3) of Pamay, from Bubastis. The first names "the field of the Shardanna in the land of the prophet Hera"; this shows the name of the Shardana lasting till 864 B.C., but perhaps only as a place-name. This paper should be consulted in detail by anyone dealing with the Bubastite history.

BARSANTI, ALEXANDRE.—Rapports sur les Travaux executés au temple de Séti Ier à Gournah. Every visitor will remember the sea of confusion of fallen roofs and walls which filled the temple of Sety. The account is given of the thorough clearing and reconstruction of the broken parts. A Nilometer cistern was discovered, of which a view is given; but the report lacks plans or sections, although they are referred to in the text.

BARSANTI, ALEXANDRE.—Rapport sur les Travaux de consolidation exécutés à Kom Ombo. The repairs needed for safety at Kom Ombo are here described. It is well that some Coptic remains are now being preserved, as a house and a column of the church here. In a passage in the house was a basket with the bronze furniture of the church sanctuary intact. Both of these reports are well illustrated with photographs.

AHMED BEY KAMAL.—Rapfort sur les fouilles . . . entre Déirout et Déir el-Ganadlah. A further sad account of the plundering of cemeteries, with only the contents of a single tomb noted together, and those so imperfectly described as to be useless. This wrecking of a large district has been of no more value to us than if the things had been left alone. The preservation of them in a provincial museum at Siut is useless after their history of grouping has been destroyed. Let us hope that we shall see no more of such unscientific plundering under professed direction of the Museum.

DARESSY, GEORGES.—Unc stèle de l'ancien empire. This stele, though brought to Cairo, was yet so fissured that it has fallen to pieces and is lost. It does not seem to be known that no matter how fragmentary a stone may be, or how rotten wood has become, flooding with melted paraffin wax will always consolidate it enough for preservation. The most decayed wood, or flaking stone, may be faced with paraffin for transport, and then dealt with at leisure.

It would be a great improvement in the *Annales* if the plates had the locality printed on each, and were numbered continuously in each volume for reference.

REVIEWS.

Museum of Fine Arts Bulletin. Boston, April, 1915. 10 cents.

In this number Dr. Reisner sums up his work of the previous year. He has cleared the streets of mastaba tombs, which stand to the west of the great pyramid The main discovery of these excavations was the series of eight portrait heads in limestone, which were placed at the bottom of the entrance pits of the A few such heads were known already (ANCIENT EGYPT, 1914, 125), but the large number now found explain them further. They are all separate heads, never belonging to a statue. They are rather too crude to be life studies for the statues, as the whole figures are more suave and impersonal. They were always deposited at the foot of the tomb shaft, not in the chamber, and therefore probably laid there after the mummy was deposited, at the close of the funeral ceremonies. This can hardly be disconnected with the frequent statements in the Pyramid Texts about the giving of the head to the deceased, in the texts of Teta, Unas and Pepy. in turn, seems clearly connected with the frequent severance of the head of the deceased, and placing it later in the grave. Probably a primitive custom of keeping the head (usual in many races now) for some months or years after death, and finally placing it in the grave, was changed when complete burial became usual, and then a ceremonial head was substituted for the actual head. This ceremonial head may have been that to which offerings had been made in the funeral service, as to the Duen-fubara in New Calabar at present (ANCIENT EGYPT, 1914, 125). Beside those heads which are ascribed by Dr. Reisner to the ruling caste, there are two other types present. One of these—the wife of a prince—is said to be "of a distinctly negroid type." This is given as the first of our portraits at the end of this number, and it is there discussed in relation to the head of Prince Rahetep. Two other heads are stated to be of a foreign type; but in the absence of profile views the relation to Egyptian or other types cannot be considered.

Another very interesting subject is the presence of Syrian pottery in these tombs of the IVth dynasty. A large jar is of the characteristic pottery known in the oldest levels of Lachish. Other smaller jars may also be Syrian, but are not so closely paralleled there. There do not seem to have been found any of the painted jars, known in the Ist dynasty royal tombs. It is mainly from the painting of these that Profs. Furtwangler and Wolters connected them with Greek island pottery, and hence the term Aegean came to be used for them (Royal Tombs, II, 46). Until some such painting is found in Syria at an early date, the Aegean connection still seems the more probable. That trade was going on there is shown by the free import of emery and obsidian in prehistoric times into Egypt, the Aegean being the nearest source for both of these stones.

The Oxyrhynchus Papyri, Part XI.—B. P. GRENFELL and A. S. HUNT. 1915. 278 pp., 7 plates.

This fresh instalment of the great mass of papyri stored at Oxford, is mainly of Greek authors who do not concern Egypt in any way. There is, however,

one papyrus which has on it two documents of great interest, one on either side. One is a Hymn to Isis, reciting her various names in different centres of worship, of which more than one hundred and twenty remain. The other is a vision of Imhetep-Asklepios to a devotee. The long list of cities where Isis was adored deserves careful geographical study, and eighteen pages of close text is given to that by the editors, without approaching finality. The earlier part dealing with Upper Egypt is entirely lost, and the extant part begins with Aphroditopolis (Atfih) and Memphis. The arrangement of the towns is evidently geographical, so much so that some light may be thrown on the positions. After Memphis are fifteen places in the west Delta, twelve in the N.N.W. Delta, four in N.N.E., six in north and west Delta, twelve in east Delta, and nineteen along the coast This ends the Egyptian section of seventy names. from west to east. foreign section is of places which are nearly all well known and can therefore be studied with certainty. The history of this list is curious, as shown by its accretion. The original list began in Asia Minor, passed thence to Macedonia, Greece, the north Aegean, and then alternately Karia and the Troad. Into this list were thrust at irregular parts: Rome, Italy, three of North Asia Minor, and three pieces of a Syrian list. The original list ran thus: -Lycia, Myra, Knidos, Cyclades, Patmos, Chios, Chalcidice, Pieria, Delphi, Thrace, Thessaly, Samothrace, Pergamon, Samos, Hellespont, Myndos, Tenedos, Karia, Troad, Dindyma. eastern list ran thus: —Paphos, Salamis, Cyprus, Asia Minor, †Petra (Nabathea?), Hypsele, Rhinocolura, Dora, Caesarea, Askelon, Raphia, Tripolis, Gaza, †Bambyke, Amazons, Indians, Persia, Magi, Susa, †Syrophoenicia Berytus, Sidon, Ptolemais, Susa on the Red Sea. This list is evidently a patchwork of four lists which joined at the + marks; the second and fourth belonged together. Then thrown in, without the least relation to anything, are the names of Cyrene, Crete, Chalkedon, Rome, Delos, Pontus, Italy, and Bithynia. Thus there have been three or four successive accretions, made without any regard to the original form of the list. This shows that we must not strain to make a perfectly continuous sequence of these Egyptian lists; probably they were likewise compiled out of preceding materials. We have noticed above that different districts of the Delta are taken in succession, but the detailed order does not seem to follow the Isis is identified with various other deitiespositions in regular sequence Aphrodite, Artemis, Astarte, Atargatis, Athena, Korē, Dictynnis, Hekate, Helen, Hera, Hestia, Io, Leto, Maia, the Babylonian Nania, Praxidike, and Themis. This is in accord with the syncretic ideas of that period. The praises of the universal goddess Isis are very similar to the beautiful address of Lucius to Isis in Book XI of Metamorphoses. Indeed, the order of the ideas is so far alike that it seems as if both were editions of the same ritual of Isis worship. In the papyrus, "guardian and guide, lady of the mouths of seas," compares with Lucius praying "Thou dost protect men both by sea and land": "the prosperity of observers of lucky days," compares with "thy health-giving right hand, by which thou dost unravel the entangled threads of the Fates"; "the greatest of gods, ruling over mid-air and the immeasurable," compares with "the gods of heaven adore thee, those in the shades below do homage to thee." The central point is: "thou bringest the sun from rising to setting, at the risings of the stars the people worship thee," and Lucius says: "thou dost roll the sphere of the universe, thou dost illuminate the sun, the stars move responsive to thy command." In the papyrus "the spirits become thy subjects," parallel to "the gods rejoice in thy divinity, the elements are thy servants"; "thou bringest decay on what thou wilt.

and to the destroyed bringest increase, every day thou didst appoint for joy," compares with "At thy nod . . the seeds germinate, and the blossoms increase." All of these passages follow in the same order in both documents, and the two together will give a close idea of the general Isis ritual. Moreover, the varied names which Isis declares to Lucius, are parallel to the identities related in the papyrus: the Pessinuntica, Athena, Aphrodite, Dictynna, Korē, Ceres, Hera, Bellona, Hecate, Rhamnusia of Lucius, are mostly in the papyrus list.

The other document is likewise imperfect at both ends. The first column or two is lost, and it begins with Nektenibis being vexed at the desertion of the temple staff, and ordering the writer Nechautis to search for the priesthood of Imhetep in accord with a document which he has found. The king then orders the descendants of the twenty-six priests to resume their hereditary functions, and assigns an additional endowment of 330 arurae of corn land for The writer then states that he had often begun the translation of this document into Greek, but delayed it. A long account follows of his illness, and a vision which appeared ordering him to proceed with the translation; this unfortunately occupies nearly the whole of the extant papyrus, and only at the end do we reach the important part. This relates that King Mencheres (Menkaura, IVth dynasty established temples and endowments for Asklepios son of Hephaistos (Imhetep son of Ptah), Horus son of Hermes, and Kalcoibis son of Apollo. latter two persons are quite unknown in Egyptian sources. As the name Horus is used before, probably Apollo here is the translation of Ra. From being associated with Imhetep these are probably deified men, like Amenhetep son of Hapi in later times. Kaleoibis looks as if Qăr-uab, "the pure boat" of a god; gar, "the boat" occurs in the VIth dynasty as a name. The original forms of these names would then be Hor son of Tehuti and Qar-uab son of Ra

Another unusual document is part of the Calendar of Church Services at Oxyrhynchos, for five months of the year A.D. 536. Nearly half the days were saints' days, observed at one or another of the churches in the city. This is by far the earliest Coptic calendar known, and is only preceded by four extant calendars of other churches.

The large export of corn from Egypt to Greece by about 470 B.C. may be noted in an Ode to Alexander I of Macedon, where Bacchylides mentions "the corn-laden ships bring vast wealth from Egypt over the radiant sea."

[Mr. F. W. Read sends the following note on details in this papyrus.—W.M.F.P.]

Line 107: "bull-faced." The editors connect this epithet with Isis in the form of a cow (p. 192), and this is, of course, quite possible. It may also be an adoption of the same word in purely Greek compositions, where it is found without any reference to Egyptian mythology, sceing that Greek ideas were clearly more prominent than Egyptian in the mind of the author. As, however, a substratum of the old mythology still remained, it may be worth while noting that "bull-faced" was regarded as an honorific epithet from quite an early period of Egyptian history. This is shown by the somewhat rare proper names and and the second, as it stands, is by no means clear; but, taking the two together, there is no room for doubt that the first should be translated "the face of a bull," and the second, "not having the face of a bull." As all the names of negative form were certainly intended, for whatever reason,

to negate desirable qualities (note especially , "not beautiful"), this name, "face of a bull," or "bull-faced," must have been honorific, and might well be the source of the Greek expression in the papyrus.

Lines 154-5: "the 365 combined days." Line 204: "a perfect year." The editors' note on these passages (p. 218) is: "The mention of the 365 days may be connected with the circumstance that at Sais the 5th intercalary day, the last of the year, was the birthday festival of Isis; cf. P. Hibeh, 27, 205." There is apparently an oversight, as Grenfell and Hunt, the editors of both publications, have shown that the Hibeh Papyrus agrees with all the other evidence in fixing the birthday of Isis to the 4th epagomenal day. The passage runs in their translation: "In the five intercalary days: 4th, Arcturus sets in the evening and the birthday festival of Isis takes place." The editors could have had no doubt about it, for in a list of festivals extracted from the papyrus the last is "4th intercalary day, Birthday of Isis." Then we have a note which reads: "The birthday of Isis on the 4th intercalary day is mentioned in the Papyrus Sallier IV, the Esneh, Edfu, and Dendereh calendars, and by Plutarch, De Iside et Osiride, 12." This note shows the consensus of evidence on the point, but is not quite accurate since the epagomenal days are not mentioned in Payrus Sallier IV. The editors (or an Egyptologist consulted by them) have evidently been misled by the fact that a table of the epagomenal days was given by Chabas in the work, "Le Calendrier des jours fastes et néfastes," in which he translated Papyrus Sallier IV; this table was derived from Leyden Papyrus I, 346. There is nothing in Egyptian to justify the association of Isis with the arrangement of the calendar; all this, like much else in the papyrus, stands entirely apart from the true Egyptian tradition.

The Rock Tombs of Meir, Part II.—AVLWARD M. BLACKMAN. 46 pp., 35 plates. 4to. 25s. 1915.

This volume is the continuation of the first part of the Meir tombs which we summarised in ANCIENT EGYPT, 1915, p. 84. The present instalment of the work is excellently done. The whole tomb of Ukh-hetep son of Senbi is copied in outline; as it is on varying scales of $\frac{1}{4}$, $\frac{1}{6}$, and $\frac{1}{8}$, a key-view of the whole walls would have been desirable to show the relative size of each part. The details are given more fully in 15 photographic plates, which are far more clear than most such publications, and 4 plates of signs and details drawn. The Beja herdsmen figure here as in the other tomb; the fight of the boatmen is also a good subject, but otherwise most of the sculptures are of the kind usual in the Vth and VIth dynasty, though here as late as the beginning of the XIIth dynasty. An unusual feature is the large amount of squaring left on the walls, owing to the intended carving never having been executed, and the drawing being left unchanged. This seems to be the original squaring for the draughtsman, and not later lines put on for the sake of copying as was done at Gizeh in the Vth dynasty tombs. Rare figures of animals are the giraffe and the Mesopotamian deer with branching horns; Mr. Blackman might have added to his references the earliest dated one in Medum, XXVII. Among the signs which are specially figured and discussed, the senth, twisted cord, is stated here to be the earliest example; but it occurs on several cylinders of the 1st dynasty (ANCIENT EGYPT, 1914, 75). The sign kher is not a drain or sink, but obviously a tripod stand used for upholding vases, two legs in front and one seen at the back; hence its meaning of "under," "being

laden," or "supporting." The suggestion that the *neter* sign is derived from little flags put on sacred places, as in Nubia at present, would agree with such a sign as is seen on poles before a shrine in the Ist dynasty (*Royal Tombs* II, x, 2), but would be difficult to reconcile with the constant division of the top of *neter* into two strips in all early examples.

The Civilisation of the Ancient Egyptians.—A. BOTHWELL GOSSE. Large 8vo, 161 pp., 154 figures. 5s. (Jack.)

The publishers have a good scheme of freely using the facilities of modern illustration to familiarise general readers with different civilisations, ancient art, and present science. The illustrations of the present volume are largely drawn from Wilkinson and Lepsius, with the mannerisms of both styles; there are also many photographs, which will give a sounder view of Egyptian art. The twelve chapters comprise the general scope of the civilisation as known to us, though mainly from large monuments and literature rather than from the smaller objects of daily life and usage. Little of the large stores of domestic material in our museums has been drawn upon, doubtless because illustrations of these are not to be had so readily as of the great monuments; it would be very desirable to bring forward more of the actual surroundings of daily life, such as have been so well arranged and published for Roman life, in the British Museum. the book shows a good general acquaintance with the various branches of the subject and the publications, without the serious mistakes which are too often seen in popular books. A few points might be amended, as the mention of cotton being cultivated, of cutting hard stones with metal tools, or of enamelling, none of which were in use. As a whole, the book may be commended as a good all-round view of ancient Egyptian life and its real spirit and feeling, especially for elder children, for whom the text seems intended.

Amentet, an Account of the Gods, Amulets, and Scarabs of the Ancient Egyptians.—A. E. Knight. 8vo, 274 pp., many figures. 12s. 6d. (Longmans.)

This is announced as being a compendium for the collector; accordingly it adopts the dictionary form of alphabetic arrangement rather than a systematic view. It is thus a book of reference, and not a treatise to be used for general ideas. The author frankly states that the different sections of it are drawn from Daressy's Cairo Catalogue of Divinities, Budge's Gods of the Egyptians, and Petrie's Amulets. For those who have no larger works at hand, this practical hand-list may be of use, as being correct in essentials, and with but few misprints. corrections of the sources have been attempted, they are not all successful. frontispiece is a travesty of Egyptian style, which shows, we fear, that the author is not acquainted with Egyptian art. It is most unfortunate that not only here, but also in the largest series of figures of gods lately issued, the public is entirely misled as to Egyptian drawing and detail of style. Nothing like these figures was done in any age of Egypt. On p. 6 the body of faience figures is said to be "a kind of frit made of powdered schist or limestone." It is safe to say that neither of these materials was ever used; the body is of very fine and pure quartz sand, with a trace of binding material, probably alkali. The origin put forward for the onkh sign is impossible in view of the early forms, with bow knot and two ends, which can only be understood as a tied girdle. The kheses is not an "angle amulet," as an angle may be of any number of degrees; it is a square, which properly means a right-angle, as a "carpenter's square"; the use of square for

an enclosed figure is only a recent corruption of English. The section on scarabs is the least successful; though said in the preface to be "well up to date," it is far from complete or accurate. Only sealings of two kings are named in the Ist dynasty, though others of all eight are known. Den-Setui is put in the IInd dynasty. The most complete collection is treated as having been scattered, many references being given to objects "formerly in the Petrie Collection," though the whole of those, and many more, are to be seen any day in University College. Another cylinder is said to be "in the Poignon Coll." Long ago it was lost to sight, then bought from a dealer, and is now safe in London (Univ. Coll.). An old statement is quoted that the earliest cartouche is of the IIIrd dynasty; but the cartouche belongs to kings of the Ist dynasty on the new pieces of the Annals. The statements of the numbers and rarity of scarabs are very incomplete. Saptah's and Tausert's are not rare, hundreds were found in their temple deposits. Of Rameses VII there are none in the British Museum Catalogue, and Rameses IX should now be placed as Saptah II in the XIXth dynasty. The whole of this section should have been done thoroughly, or left alone; incomplete statements are of no use to a student or a collector. author does not seem to know the Louvre Collection (p. 260), or he would remember one of the most striking objects among the scarabs, the marble monstrosity of the Antonine age, which he asserts to be the same as the green granite colossal scarab of the British Museum. We hope that further experience will enable the author to amend a work, which, in any case, will be welcome to a large number of collectors.

A Coloured Drawing of the Madeba Mosaic Map.—I. M. CASANOWICZ, (Proc. United States Nat. Mus. Vol. 49.) 1915.

This is a publication of a hand copy of the celebrated mosaic map of Palestine and the Delta, which is confessedly not completely accurate. It seems hardly worth while to issue a less perfect copy than those already published. The Egyptian interest of it is in giving the road across the Delta from Pelusium to Alexandria, by Sethrois, Tanis, Thinnis, Beunēsos, Xois, and Khereu; but as this is placed along the east side of the Sebennyte arm it is evident that the map maker quite mistook the arrangement of the sources that he had.

Notes on Bisharin.—Prof. SELIGMAN. (Man, June, 1915.)

The resemblance of some Bishari objects to Egyptian forms is striking. The basket used for milk is like the baskets of the 1st dynasty. The wooden headrest is of a type known in the Old Kingdom. The basket with a pattern of black and white triangles is of the family of basketry of the later prehistoric age. All these fashions were extinct long before 3000 B.C. and therefore it is the less likely that they were borrowed from the Egyptians. We should rather see in these the descendants of the types which entered Egypt from the desert people, some 7,000 years ago; a simple desert tribe will maintain styles unlimitedly, as in the pottery of the Algerian Mountains which belongs to the family of the Egyptian work about 10,000 years ago.

The Stela of Sebek-khu.—T. ERIC PEET. 8vo, 22 pp, 2 plates. 2s. Manchester Museum. 1914.

This is a re-edition of the stele translated by Newberry in *El-Arabah*. It is of historical value as a record of the earliest known war by Egyptians in Syria.

Senusert III is said to have gone to Sekmem, where he was attacked by Sekmem and the Retenu, and fought with the Aam (Syrians). Sebek-khu distinguished himself and was rewarded by the king. So far, the position of Sekmem has not been identified. The guess of Max Muller placing it at Shechem is unlikely, as an Egyptian would not so soon have penetrated into the hill country.

General Guide to the Collections in the Manchester Museum.—66 pp., 8 plates. 3d. (Longmans.) 1915.

Manchester has long been known as having one of the best Museums outside of London, especially in Zoology (fossil and recent) and Egyptology. The present well-packed catalogue gives a quarter of its pages to Egypt. A general outline of the history and early period of the country is given, and the classes of antiquities of each age are described. A main feature of the collection is the large number of groups from tombs, and the precise localising and date of the objects, which have nearly all come from registered excavations.

NOTES AND NEWS.

So far, we have not heard of any losses to English Egyptology since the lamented death of Mr. Dixon. Mr. Engelbach, who was at Suvla Bay, is, we hope, now moved to safer quarters. Mr. Eric Peet has now a commission in the A.S.C., and will be in active service. Dr. Derry has been for some time in the Hospital Force in the Mediterranean. Prof. Ernest Gardner—in the guise of a Naval Lieutenant—is using his great knowledge of modern Grecks, their ways and their language, on the Salonika Expedition. Miss Rowdon, who took the diploma in Egyptology, is in the Admiralty Office. Mr. Sidney Smith, a former student of Egyptology at University College, and later on the British Museum staff, was wounded, and is invalided home from France. Likewise Mr. Hambley is invalided back from the Dardanelles. Miss Theodora Dodge—as an American neutral—worked on hospital and relief work at Brussels for nine months; the strain of repression there has now sent her home.

Foreign archaeology has suffered much more severely. Beside the immense loss of perhaps the most accomplished European archaeologist, M. Joseph Déchelette, and M. Jean Maspero—already noticed here—we now learn of the death of Prof. Strack the principal authority on the Ptolemies, of Prof. Sudhaus the Hellenic scholar, and of the son of Prof. Willamovitz-Moellendorf. The address which the latter professor lately gave in Berlin was a sorrowful forecast of all Europe being split into two worlds, without the least scientific intercourse within the lifetime of any scholar now living. Such must be the result of a determination to grasp by every means, fair or foul, "world-power or going under." Such an aim could have but one result, the permanent division of Europe, and annihilation of all intercourse; those who adopted that formula could have been under no illusion as to the result. They have rent the world.

THE PORTRAITS.

THE limestone head found by Dr. Reisner in a tomb of the IVth dynasty at Gizeh, is of a heavier and rather coarser type than that usually seen among the upper class of Egyptians of that age. The discoverer goes so far as to say: "The wife of the prince is curiously enough of a distinctly negroid type. I believe the earliest known portrait of a negro. The woman seems, however, not of pure negro blood, and may possibly be the offspring of an Egyptian and a negro slave girl." This seems rather a low estimate of a form which is only rather prognathous; the lips show no trace of negro eversion, and do not differ from those of some of the other heads, while the nose is slightly aguiline. The obvious connection of this head is with that of Prince Rahetep, given here as the second There does not seem to be a profile photograph available, so a threequarter head is illustrated, which shows sufficiently the type of the profile. Every detail seems to be like the Gizeh head; the flat and high forehead, and slight brows, the angle of the nose and its curvature, the high cheek-bone, the position of the jaw and mouth, the angle of the lips and facings, the curve of the chin. The one head is just as much—or as little,—negro as the other. Rahetep was a son of a king, probably of Seneferu as his tomb was at Meydum. He was by no means slighted, as he had the honour of being High Priest of Heliopolis, governor of Buto, and a general, besides holding various other dignities. not seem as if he were son of a negro slave, but rather on an equality with any other He was probably buried in the reign of Khufu, and hence the Princess of Gizeh, buried in the reign of Khafra, would seem to have been one of his daughters of whom three are known in his tomb sculptures, Nezem-ab, Setet, and Merert. Where this type came from it is difficult to say owing to the scarcity of com-The form of the nose is that of the chief, probably of the Fayum or North-west Delta, who is represented upon the slate palette, as being smitten by The mouth and jaw, however, are heavier, and not so Semitic in type; there is no parallel for it among the early types known in Egypt, and some additional influence between the 1st and IVth dynasty must be supposed.



WIFE OF A PRINCE.



LIMESTONE.

PRINCE RAHOTEP. CAIRO MUSEUM.

MEYDUM.

ANCIENT EGYPT.

NOTE ON THE GORRINGE COLLECTION.

IN 1879 the arrangements for the transport of the obelisk from Alexandria to New York were undertaken by the government of the United States. For this purpose Lieut.-Commander Henry H. Gorringe was sent out, and after many obstacles he began to move the obelisk on 28th October, 1879. He succeeded in floating it by 1st June, 1880, and it was erected at New York on 23rd February, 1881. During his stay in Egypt his occupation about the obelisk drew his attention to the antiquities, and he formed a collection which he brought home with him. After his death this collection was entirely lost to sight.



Terra-cotta Figures of Harpocrates.
ROMAN PERIOD. GORRINGE COLLECTION.

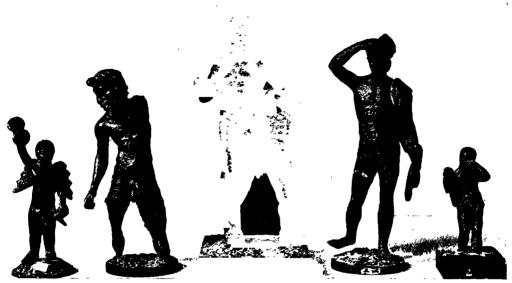


FEMALE FIGURES AND BUST OF ISIS.

ROMAN PERIOD. GORRINGE COLLECTION.

A notice of my discovery of the Gorringe Collection of Egyptian antiquities, and a short description of the same, appeared in the Recueil de Travaux relatifs à la Philologie et à l'Archéologie égyptiennes et assyriennes, Vol. XXXVI. The most

important piece of the Collection, the mortuary stela of Ptaḥmes, was there described, its text having been published in Vol. XXVII of the same Journal by Ahmed Bey Kamal in an article entitled *Sur une stèle aujourd'hui perdue*. The mortuary stela of Ptaḥmes, as an examination of it shows, belongs to the XIXth dynasty, and is in an excellent state of preservation.



BRONZE FIGURES OF EROS, SATYR, HERAKLES WRESTLING, ETC.
ROMAN PERIOD. GORRINGE COLLECTION.



FIGURES OF OSIRIS, SEKHMET, NEITH, AND ISIS.
XXVITH DYNASTY. GORRINGE COLLECTION.

The Collection contains many other valuable and interesting objects. Among them are: Two beautiful sphinxes of limestone, both 21 inches by 12 inches by 8 inches; two limestone Horus birds, both 14½ inches long and 12½ inches high;

a fine mummiform figure, 17 inches high and 13 inches round the shoulders, well preserved and painted in brown, black, and gilt; a late marble statue of Rameses II with the double crown and the uraeus, 221 inches high and 18 inches round the shoulders; eight small terra-cotta figures; many fine bronze statues probably belonging to the Saite age, among them being Sekhet, Tefnut, Osiris, Isis, Tum,



BRONZE FIGURE OF PTOLEMY X LATHYROS. GORRINGE COLLECTION. (See p. 95 and end portraits.)

Anubis, Hathor, Rē, and others; about fifty small charms, among them being examples of the ankh, the thet, the dad, and the uas, the hr, the ynt, etc.; terra-cotta rings; many scarabs, some valuable; some pottery; many bronzes; and one of 34338 the claws of the New York obelisk.

There is also a fine collection of Oriental coins containing about three hundred pieces, many of which are valuable. Among the Greek objects is an ancient torso of Marsyas, an early copy of the original of Myron of the first half of the fifth century, B.C.

There is a stela of sandstone measuring $21\frac{3}{4}$ inches by $15\frac{1}{4}$ inches by 2 inches. It bears the cartouche of Thutmose IV of the XVIIIth dynasty. Behind the Apis



Bronze Figure of Ra and Amulet Box of Obelisk Form
Dedicated to Basiet.

XXVIII Dynasty.

GORRINGE COLLECTION.

is the name of Amon-Rē, lord of heaven; and before it is the Hor of the upper and lower world. The text contains a series of laudatory titles in four horizontal lines, reading from right to left. There are reasons for believing that the stela is a forgery.

The accompanying figures are a fair representation of the contents of the Collection.

SAMUEL A. B. MERCER.

AN EARLY REPRESENTATION OF TAURT.

THE ivory comb of which a photograph (natural size) is here reproduced was bought from a dealer in Luxor early in 1914. It is of a well-known character, common at the end of the predynastic period or early in the dynastic, but specially interesting in that it portrays the Hippopotamus-goddess Taurt in the highly stylised form and conventional position in which she is habitually represented in later times.



IVORY COMB WITH FIGURES OF TAURT.

Representations of the deities of prehistoric times are rare; and, although I have not been able to make an exhaustive search through literature, I believe that no such early example of Taurt has been recorded. The fine image in the British Museum cut from a hard breccia may be regarded as archaistic rather than archaic. The fact that she is here represented in her conventional form on an object of no ceremonial importance, seems to indicate that even at the early period to which this comb belongs, the cult of the goddess was already fully established.

C. G. SELIGMAN.

THE EGYPTIAN ELEMENTS IN THE GRAIL ROMANCE.

(Continued.)

Incidents showing an Egyptian Origin.

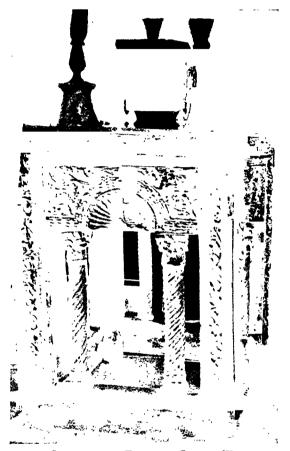
FURTHER proofs of the Egyptian origin of this portion of the Grail Romance are also found in the passages which relate to the Grail itself and to Josephes. At the beginning of the legend, Joseph is told to make a wooden ark ("a luytel whucche," as the alliterative "Lyfe" expresses it). This is to contain the Holy Blood, and various marvellous sights are seen by those who look into it; it is covered with a "plateyne," a word hitherto unexplained. The account of the use of the ark points to a Christian ceremony, but a ceremony not in use in the Western Church. When, however, the Coptic rite is investigated, the wooden ark is found to play



 SACRAMENTAL ARKS OF ARABIC AND BYZANTINE STYLES. 2. COPILC MUSEUM, CAIRO.

a large part in the celebration of the Eucharist. Butler (Coptic Churches, Vol. II, pp. 42, 43) says: "Every Coptic altar is furnished with a wooden ark or tabernacle... It is a regular instrument in the service of the mass, and at other times lies idle upon the altar. It consists of a cubical box, eight or nine inches high, the top side of which is pierced with a circular opening just large enough to admit the chalice. At the consecration the chalice is placed within the tabernacle, and the rim when it is thus enclosed is about flush with the top, so that the paten rests as much on the tabernacle as on the chalice. The four walls of the tabernacle are covered with sacred paintings—our Lord and St. John being the most frequent

figures." The ark is so important and sacred in the Coptic ritual that there is a special prayer for its consecration: "O Lord our God, who didst command Moses thy servant and prophet, saying: Make me precious vessels and put them in the tabernacle on Mount Sinai, now, O Lord God Almighty, stretch forth thy hand upon this ark, and fill it with the virtue, power, and grace of thy Holy Ghost, that in it may be consecrated the Body and Blood of Thine only begotten Son our Lord." Joseph's wooden ark was then the tabernacle of the Coptic rite. In the actual celebration of the mass according to the Coptic ritual, the priest, after the prayer of oblation, places on the chalice a little flat round mat, made of silk stiffened with some coarser material; this I take to be the "plateyne," or little flat thing, which Nasciens lifted up in order to look inside the chalice.



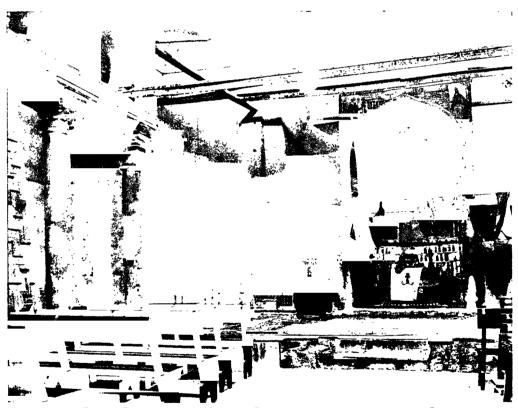
3. SACRAMENTAL TABLE OF CARVED WOOD. FIFTH CENTURY, A.D. COPTIC MUSEUM, CAIRO.

Coptic ritual is found again in the consecration of Josephes. The ceremony began with a procession issuing from the ark; two angels came first, sprinkling holy water; they were followed by two others, each carrying a golden bowl and a towel; then three more bearing golden jewel-encrusted censers and boxes of sweet spices. After these came an angel on whose forehead was written "ie sui apieles forche del tres haut signour"; upon his two hands was a cloth, green as an emerald, on which rested the Grail; on his right was an angel carrying a head, the richest ever man saw; on his left, another angel bearing a sword of silver and gold.

¹ Neale, Eastern Church, Gen. Introduction, I, p. 186.

Behind them were three angels carrying coloured tapers, and then came Christ, robed in the robes of a celebrant priest. The first angels sprinkled the people, and then went round about the "palace" sprinkling; when they arrived before the ark they bowed to Christ and to the ark. Christ called Josephes, then took him by the right hand and drew him close, making the sign of the cross upon him. There issued from the ark a grey-haired man carrying vestments, and a young man with a white and vermilion crook in one hand, and a mitre in the other. They robed Josephes, the sandals being put on first, and seated him in the richest chair, such as never before was seen. All the angels then came before him, and Christ anointed and consecrated him; the holy oil was deposited in the ark. Christ placed the ring on Josephes' finger, and gave an address on the mystical meanings of the vestments. Josephes then celebrated mass.

The points of coincidence between this and the Coptic rite are best seen by putting the two in parallel columns. The Coptic ritual is taken almost verbatim from Butler's *Coptic Churches*.



4. COPTIC CHURCH OF ABU SERGEH, IKONOSTASIS REMOVED EXCEPT ON LEFT.
PHOTOGRAPH BY REV. C. T. CAMPION.

JOSEPHES.

- 1. The ark becomes a room from which the angels issue.
- 2. Josephes stands at the door of the ark, two angels holding his arms; one angel bears an ampulla, the other a censer and box.

COPTIC.

- I. The sanctuary is closed with a solid wooden screen (Fig. 4), which makes it appear like a box. The procession at a consecration issues from the sanctuary.
- 2. The patriarch stands below between the altar and the throne, and faces eastward, a priest holding him on either side.

- 3. Josephes gazes into the ark and sees an altar draped in white, and on it the instruments of the Passion and the Grail covered with red samite.
- 3. The ordinary covering of a Coptic altar is a tightly fitting case of silk or cotton, sometimes dyed a dim colour. Before a celebration, besides the ordinary covering the altar must have a second vestment, which shrouds the whole fabric. All the vessels must be in readiness upon the altar, and before the commencement of the mass the sacred elements are covered with a veil of white or coloured silk (Fig. 5).



5. VEILED ARK UPON THE ALTAR. COPTIC CHURCH OF ABU SEYFEYN, CAIRO. PHOTOGRAPH BY MRS. BUTCHER.

- 4. Two angels head the procession sprinkling holy water.
- 5. Two angels, each carrying a golden bowl and a towel.
- 6. Three angels carrying golden censers and boxes of sweet spices.
- 7. Three angels; the middle one bearing the Grail which rests on a green cloth;
 - 8. the angel on the right bears a head;

5. The cover and basin, for the washing of hands at the mass, are part of the complete furniture of a Coptic altar. In the Latin Church, ewer, basin, and towel were given to the deacon at ordination.

At the consecration of a patriarch, first come deacons bearing uplifted crosses, burning tapers, and flabella (Fig. 6);

- 6. Then a priest swinging a thurible (Fig. 7).
- 8. It was customary for the patriarch sitting on the throne to hold the *head of St. Mark* [this was on the last day of the consecration festival].

- 9. the angel on the left bears a sword.
- 10. Angels carrying coloured tapers.
- II. Christ in sacramental garments tells Josephes that he is to be the sovereign bishop. Josephes is vested in pontifical robes and seated on the episcopal throne. All the angels come before him, and Christ anoints and consecrates him.
- 11. The senior bishop lays his right hand upon the head of the patriarch, while the archdeacon makes a proclamation: again he lays on his hands and recites the invocation. Then the bishop signs the patriarch with a cross upon the head [the language of the rubric here rather suggests the use of chrism, but is not clear upon the point], proclaims him "archbishop in the holy Church of God of the great city of Alexandria," and vests him with the patrashil and chasuble. After many prayers the chief bishop and all the bishops lay on their hands; and when the patriarch has received the pall and cope, crown and staff, he is led up to the throne and thrice made to sit on it; bishops, clergy, and laity, all salute him.



6. COPTIC DEACON READING THE GOSPEL. PHOTOGRAPH BY MRS. BUTCHER.

- 12. Josephes celebrates mass.
- 13. The bread becomes flesh and the wine blood.
- 14. Christ tells Josephes to divide the bread into three parts.
- 15. Josephes sets Leucam to watch the ark day and night.

- 12. The patriarch, directly after consecration proceeds to celebrate the Eucharist.
- 13. The doctrine of the Real Presence, of the change of the bread and wine into the very body and blood of our Lord, is held by the Copts in its most physical literalness.
- 14. The celebrant signs the offete thrice, and breaks it into three portions.
- 15. In Egypt the practice of reserving the host, which has long been discontinued, once prevailed.

The most striking of these coincidences is the importance of a dissevered head in the ceremony. The Grail legend indicates that it was carried round the church to be seen by all; and, though there is no mention of such a procession in the ritual of the consecration of a patriarch, it is certain that so holy a relic must have been borne in solemn pomp from its resting place to the enthroned patriarch. There is a procession recorded in connection with this sacred head. When the Church of St. Mark at Alexandria was destroyed, a ship's captain stole the head of the saint; the ship miraculously refused to leave the city until the head was restored to the patriarch, Benjamin, "And the Father Patriarch returned to the city, carrying the head in his bosom, and the priests went before him with chanting and singing, as befitted the reception of that sacred and glorious head" (Evetts, *History of the Patriarchs of the Coptic Church*, in *Patrol. Orient.*, I, p. 500). The Grail legend also states emphatically that the head was richly decorated; at the service when the newly consecrated patriarch held the head of St. Mark he placed a new veil or covering upon it. It was this veil evidently which was richly ornamented.



7. COPTIC PRIEST CENSING THE CONGREGATION.
PHOTOGRAPH BY MRS. BUTCHER.

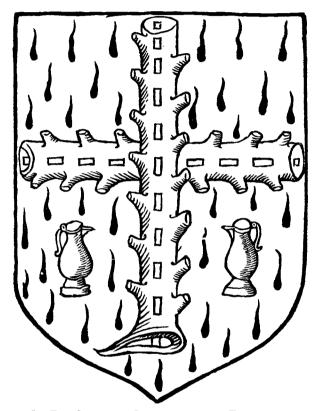
The procession of the Grail appears to be the equivalent of the Great Entrance of the Eastern Church, the solemn bringing in of the sacred elements. This is a purely Eastern rite, which is not found in the Latin Church. In the Coptic Church this ceremony has dwindled down to the carrying of the wafer round the altar by the priest, followed by deacons bearing lighted tapers; in the Melkite Church, however, the procession is conducted with greater splendour.

The vestments with which Josephes was clothed appear to be those in use in the Coptic and Byzantine Churches. Mystical meanings assigned to different vestments first appear in Europe about the middle of the thirteenth century; there is no proof that these meanings were found in the *Book of Melkin* so it is impossible to say that they come, with the rest of the story, from Egypt.

Though many of the points which coincide with the Coptic ritual, will coincide equally well with the Western rite, yet there is a residuum which is not Western;

and of these definitely Eastern practices some—such as the richly decorated head—point with equal certainty to Egypt. Even the fraction of the oflete into three seems to have been peculiar to the Roman, Ambrosian (Milan), and Alexandrian rites. It seems then that we have an account of a ceremony of an Eastern Church, "edited" by someone to whom only the Western ritual was familiar, and who therefore added the parts which he thought had been omitted by the original author.

The Book of Melkin makes a curious and interesting statement in these words: "For Joseph has with him, in the sarcophagus, two little vases, white and silver, filled with the blood and sweat of the prophet Jesus. When his sarcophagus shall be found again, whole and unharmed, it will be seen in the future and will be open



S. THE SHIELD OF JOSEPH WITH THE FLAGONS OR CRUETS.

From the black-letter copy of the Lyfe of Ioseph of Armathia, printed by Richard Pynson in 1520.

to the whole world. Then from that time, neither water nor dew of heaven shall ever fail the inhabitants of this noble island" (John of Glastonbury, Hearne's edition, p. 30). The two little vases or fassula are, as Skeat pointed out, evidently the same as the two little cruets represented on the title page of the black letter Lyfe of Ioseph of Armathia, printed by Richard Pynson in 1520. The two cruets are part of the altar vessels for the Eucharist in most, if not at all, Christian churches. One cruet is for wine and one for water, which, in the Book of Melkin, are symbolised as the "blood and sweat of the prophet Jesus." Though there is nothing peculiarly Coptic, or even Eastern, in the use of cruets at the Eucharist, there seems to have been some special ritual concerning them in the Coptic Church at some early period. "There is one singular usage of the Copts. . . . In several

of the churches, though not in all, a small glass crewet, filled with unconsecrated wine, may be seen resting in a cup-like wooden crewet-holder, which is nailed on to the haikal-screen *outside*, and usually towards the north. There is no such arrangement in the Cairo Cathedral, nor does the position of the crewet connect at all with any point of the present ceremonial. One can only surmise that it is the relic of some forgotten ritual practice. At Sitt Mariam Dair Abu's-Sifain there are two such crewet-holders on the screen" (Butler, *Coptic Churches*, II, p. 55). As regards the term "the prophet Jesus" I shall have more to say later.

The sarcophagus of Joseph is mentioned in the *Perceval le Gallois*, where it is the magical coffin which will open only for the Best Knight in the World. Within



9. COPIIC FLAGON. BRITISH MUSEUM.

it were the pincers, still bloody, with which the nails were removed from the hands and feet of The Crucified (Evans, *High History*, I, 9; XV, 23, 24; XVIII, 25).

In every mention of Josephes it is always said that he was consecrated by Christ Himself; though Lovelich's version gives a detailed account of the consecration and though, as I have shown, it coincides in a remarkable manner with the Coptic ritual, there is nothing in that ritual analogous with the statement that Christ is present in person and actually performs the act of the laying on of hands. But Dr. A. J. Butler has called my attention to the parallels in Coptic history given in Evetts' History of the Patriarchs of Alexandria (Patrol. Orient., t. 1, fasc. 4). "Demetrius" [the 12th patriarch] "had a gift from God, which was that when he had finished the liturgy, before he communicated any one of the people, he

beheld the Lord Christ, giving the Eucharist by his hand" (p. 156). And the celebrated patriarch Benjamin thus relates how he consecrated the church of St. Macarius in the Wady Natrūn, and marked the consecration-crosses upon it. "When I marked the sanctuary with the chrism, I saw the hand of the Lord Christ, the Saviour, upon the walls anointing the sanctuary" (p. 510). He repeats the statement again: "I beheld with my own sinful eyes the holy palm, the sublime hand, of the Lord Jesus Christ, the Saviour, anointing the altar-board of this holy sanctuary" (p. 511). Here it was a church, and not a bishop, that Christ "sacred with his owene hande," but it is a proof that the idea of the hand of the Lord visibly taking part in an act of consecration was known to the Copts.

Another interesting proof of the connection with Egypt, and the derivation both of names and religious ideas from that country, lies in the name of the castle in which the Grail was finally housed. This is given, in Lovelich's version, as Corbenie. It is said to be a Chaldean word:

"This Castel scholde ben Clepid Corbenie, And in Caldev was this scripture, whiche Is to vndirstonde As be lettrure, as this place frely schal be, Trosour Of the holy vessel ful Sykerle."

The resemblance of Corbenie to the Biblical Corban has been noted by many commentators on the Grail Legend. The true derivation is the Arabic εξυνό, Qurbān, the usual name in the Coptic Church for the Eucharist. The Arabic itself is adopted from the Syriac Qurbana, which is the equivalent, in ecclesiastical language, of the Greek Θυσία. The exact meaning of the word is "offering," or more literally "bringing near," and the word-group to which it belongs is found in Hebrew, Arabic, and Syriac. The form Corbenie reproduces exactly the Arabic word Qurbānī, the nisba-form of the noun, which means "Belonging to the Eucharist." Castle Corbenie then means "The House of the Eucharist."

The little human touch, where Sarracynte as a little girl is frightened of the hermit, is another suggestion of the Egyptian origin of the legend:

"For Certein he hath A long berd, and An hore, And Euere whanne I lokede vppon his berd, Sekir, Modir, I scholde ben Aferd."

The cliffs and wadys of Egypt were full of cells and hermits in early Christian times. Most of the hermits neglected their personal appearance, and let both hair and beard grow to a great length, so that the wild appearance of one of these strange solitaries would certainly alarm any child. The reputation for sanctity and for powers of healing, which such men acquired, seems to have been very great, judging from the incidents recounted in the lives of hermit-saints.

A noteworthy fact is that the kingdom of Sarras did not go from father to son. Evalach, a foreigner, was appointed king by his predecessor; on his departure from Sarras (as Mordrayns) he appoints Aganore to succeed him. Evalach is said to have a son, who does not come into the story; there is nothing to show that he is dead, yet he is not Evalach's successor. Later on Galahad and Percival come to Sarras and find King Estourause upon the throne; on his death, Galahad is appointed king. There are two interesting points here, both connected with the names of the foreigners, Evalach and Galahad, who obtain the crown: (1) It is a very suggestive fact that the name Evalach can be derived from Ibn al Ukht,

"the Son of the Sister." Seeing that the right to the throne of Egypt went in the female line, either by inheritance or by marriage, down to as late a period as the Roman Conquest, it is quite possible that the dominion of a small principality like Sarras followed the same custom. Among a people who practise matrilineal descent, brother-and-sister marriage is the common usage; and it is more than likely that in a royal family—which is always more conservative as to ancient customs than families of lower rank—"Sister's Son" might indicate the heir, and be a title, not a name. The great importance of the queen in the narrative points to her being of as high rank as her husband. (2) As regards the reign of Galahad, Magrizi gives a little information. In speaking of the Goliath (Galūt) whom David killed, he says: "His son Galūt went to Egypt where the kings of Madian were reigning; they installed him in that country as king of the western region, but in the end he went away to the West" (Bouriant's translation, M.A.F., XVII, p. 412). The name Goliath, in Hebrew גליה, is rendered in Arabic as בונים Gālūt, in the Koran, באום Gilyīt, in the Synaxarium; the Septuagint has the spelling רסאום which shows the vocalisation. It is therefore a tri-syllabic name containing the three consonants GLD (or T) and is the Oriental equivalent of the Western form Galaad or Galahad. We have then not only the equation of the name, but the same fact recorded by an Arab historian which is already known to us from European sources, that a foreigner of this name was king of the western side of the Delta. The name Galahad is also connected with Sarras, when Joseph's son Galahad is begotten there. This Galahad was, according to some of the genealogies. the ancestor of Sir Lancelot (whose baptismal name was Galahad) and therefore of the great Sir Galahad, who thus bore a family name.

I have not attempted to discuss the history of Joseph of Arimathaea before his appearance in Egypt, but I cannot help quoting here a story extant in Coptic literature which may account for the mention of St. Philip as the Apostle who taught and baptised Joseph. There was an Egyptian silversmith, named Philip, a Christian, who had a friend named Theodosius, a Jewish priest and a man of high rank in Jerusalem. Philip tried for some time to convert Theodosius, and at last. on one of his journeys in Syria he met Theodosius, who had heard the Virgin Mary herself relate the story of the virgin birth, and had therefore embraced Christianity. "And I, Philip, had great joy with Theodosius the neophyte. And when many of the Jews saw this, knowing that he was one of the teachers of the Law among them, and that he was a ruler over them, and had acquired great honours among them, and then had abandoned all that, and become a Christian, many of them believed and were baptised" (Evetts, History of the Patriarchs of Alexandria, in Patrol. Orient., I, p. 134). The account of the virgin birth, as given by Theodosius. is very similar to the dogmatic portions of the Grail legend; and the description of Theodosius himself, and the effect of his conversion upon his friends is practically the same as the account of Joseph of Arimathaea, the parallel being made closer by the name of the Christian teacher.

Indications of Date.

The story by the time it reaches us has obtained many additions and accretions. The latest part is probably the statement of dogma given in the consecration of Josephes, in the dreams and their interpretations, and other doctrinal portions. Of the first of these Mr. Henry Jenner says:

"When Josephes goes into the ark to consecrate, 'il n'i dist ke ches paroles seulement ke ihesus crist dist a ses disciples en la chaine,' and 'si devint tantost li pains chars and li vins sans,' etc. Now this deliberately takes the Western side in what was then a very fierce controversy-whether the consecration was effected by the recitation of the Words of Institution (Hoc est enim Corpus meum and Hic est Calix Sanguinis mei) or by the subsequent ἐπίκλησις or Invocation of the Holy Spirit, which is found clearly expressed in all Eastern rites, sometimes more or less clearly in the variable 'Post Pridie' prayers in the Hispano-Gallican rites, and vaguely, if at all, in the Roman. It was not until about the twelfth century that men began to inquire about the moment at which the Consecration took place. Until that time they were content to know that when the Priest began 'Hanc igitur oblationem' bread and wine were on the altar, and when he came to the end of the prayer before the Paternoster they had become the Body and Blood of Christ, and that the consecration was effected by the prayer of the Church. Great Elevation, with the direction 'genuflexus adorat' and 'ostendit populo,' after each of Our Lord's words, was introduced about the year 1200, to mark the exact moment, which had been left vague by the Lesser Elevation (which is still made) at the end of the whole prayer. The rather materialistic sequel, 'et lor vit iosephes apiertement ke il tenoit un enfant,' etc., is no doubt directed towards the controversy on transubstantiation raised in the eleventh century by Berengarius of Tours, and not finally settled till the Fourth Lateran Council in 1215."

This part then is European, and therefore lies outside the scope of this inquiry, as it would have been added after the story arrived in England.

The form of the story, and many of the names, are Arabic, the most important name being that of the manuscript, in which apparently occurs the earliest mention of Joseph of Arimathaea, and from which probably the whole legend was derived, namely, the Book of Melkin. This shows that the date must be later than the Arab Conquest in 641. The only method of arriving at the date, which can after all only be approximate, is to discover at what period the Arabic manuscript, or a Latin version of it, may have been brought to England. The legend itself is said to have been written by Christ:

"For ther Neuere was Creature so hardy that dorste with-sein this holy story, Whiche Crist him self with his Owne hond It wrot vs forto don to vndirstond For we ne Radden neuere In non storye that Crist him Self wrot Sekerly to forn his passiown In Ony stede but In two, As we don Rede, Whanne to Moises he wrot the lawe the Secund was whanne the Jewes certeinly a womman hadden take In Avowtry."

The French version says that the first writing of Christ was the Lord's Prayer which he wrote on stone. In this story we have again that same idea, which appears to be Coptic, of the hand of Christ visibly engaged in some physical action.

Other versions, however, state that the whole account was revealed by God to a hermit. Even Lovelich, in spite of the statement quoted above, that Christ was the actual writer, says, in another place, that it was a hermit who recorded the story [the blank in the second line of the quotation occurs in Furnival's edition]:

"This storye

... that myn sire Robert Borron here From latyn Into frensch translated this Matere, Next After that holy Ermyt that god him Self hadde taken it."

The *Perceval le Gallois* and the *Merlin* are very definite. "'Sir,' saith the priest, 'this Castle is the Castle of Inquest, for nought you shall ask whereof it shall not tell you the meaning, by the witness of Joseph, the good clerk and good hermit through whom we have it, and he knoweth it by annunciation of the Holy Ghost'" (*High History*, VI, 11). In the *Merlin* the hermit had once been a knight, he was sister's son to Joseph of Arimathaea, and was called Nascien after Duke Nascien: "and this same knyght was after ravished be the holy goste into the thridde heuene, where he saugh a-pertely the fader, sone, and holy goste. This knyght hadde after the storie in his kepinge, and wrote with his owne hande by comaundement of the grete maister" (xx f., 114 b, ed. Wheatley).

I take this to mean that the manuscript was, traditionally, in the possession of some hermit. The idea of its divine origin may mean that its provenance was lost though there remained a tradition of its antiquity, and of its coming from some country in the East, where Christ had lived; but it is more likely that, like the account of the sacring of Josephes, and the consecration of the church by Benjamin, the divine origin is an integral part of the story, and derives from a Coptic original.

The personality of the hermit may perhaps throw a little light on the origin of the legend. In the *Perceval le Gallois* he is said to have been Josephes: "This high history witnesseth us and recorded that Joseph, who maketh remembrance thereof, was the first priest that sacrificed the body of Our Lord, and forsomuch ought one to believe the words that come of him" (*High History*, IX, 8). Here the hermit was the son, in the *Merlin* he was the nephew, of Joseph of Arimathaea; in other words he was one of the band of Eastern Christians who brought Christianity to the Western shores of Britain.

Leland's opinion about Joseph of Arimathaea is perhaps worth noting in this connection: "I cannot easily believe that Joseph, a disciple of the ever-blessed Christ, was buried at Glastonbury. Yet I might have believed that some very holy hermit of the same name was buried there, and that so this error arose" (Commentarii Scriptoribus Britannicis, ed. Hall, pp. 41–42).

The Church of Egypt dates back traditionally to St. Mark, i.e., to the period of the Apostles; and Egypt, always interested in religion, rapidly became a Christian country. From Egypt monasticism and asceticism were introduced into the Western churches: the monastery of St. Antony, the hermits of the Thebaïd, were models which were copied throughout Europe. Christianity was spread by Eastern missionaries, and the British Church claims to have sprung from such a source, whose doctrine had been brought direct from the East without passing through Europe. That there were connections between Egyptian and British Christianity is evidenced by certain definite statements. Eucherius, Bishop of Lyons (died 450), says that Egyptian monks settled in Gaul; other Egyptian monks are known to have settled in Ireland, where they died and were buried. St. Congar of Congresbury, whose staff also miraculously became a tree, was "the son of a Constantinopolitan Prince"; he went to the West of England, and King Ina "bestowed on him that portion of Land, call'd afterward by his name; and withall built for him a Mansion and Oratory there" (Cressy, Church History, p. 63,

ed. 1668). This was in "the year of our Lord seaven hundred and eleaven." In Glastonbury the settlement of "hermits" at the foot of the Tor dates from a very early period, and seems from the account to have been conducted on the same system as the Egyptian laura. St. Patrick disapproved of the system, and reformed the hermits, bringing them under monastic rule and forming them into a monastery. "And afterwards coming to Glastonbury in A.D. 449, he gathered together twelve brethren, whom he found there living as anchorites. And taking upon himself, although unwillingly, the office of Abbot by the wishes and votes of all, he showed these same brethren how to live the life of the cloister. For it was owing to him that the order of monks at Glastonbury had its origin: of monks ordering their life after the manner of the Egyptians. For that golden star, St. Benedict, had not yet arisen, who should illumine the whole earth with his doctrine and by his example" (Ussher, Britannicarum ecclesiarum antiquitates, p. 110, ed. 1639). Here then, I think, we can see a possible way by which the legend, perhaps in the form of the Book of Melkin, might come to England. Though it is customary to look upon the Egyptian Christians as bigoted and ignorant, it is very certain that this was not true of all. Learning still flourished in Alexandria, and manuscripts of that early time are still extant, which prove that scholarship and the ability to write large volumes were not uncommon. Such a manuscript as the Book of Melkin might well have been brought over by the Egyptian missionaries, and there is no reason why it should not have been in the form of a Latin translation. It undoubtedly belonged to Glastonbury, for John of Glastonbury quotes from it, and Leland actually saw the manuscript, or rather the fragment which still survived, when he visited the Abbey before the Dissolution. This fragment seems to have been treated with very little care, for Leland found it when ransacking the library for ancient books. From the little which he says, it would appear to have contained little, if any, more than the few lines quoted by John of Glastonbury. Leland however states, apparently on the authority of the manuscript, a few biographical details concerning Melkin, whom he takes to have been a real person, born in Wales and trained as a bard. But it is quite possible that the early translator of the Kitabu 'l-Melkiyyin took the latter word to be a personal name, equating it, as John Harding did, with Mewinus. But earlier than either Leland or John of Glastonbury there is mention of a manuscript at Glastonbury which contained the Grail legend. This comes down to us as the Perceval le Gallois, which ends with the words: "The Latin from whence this history was drawn into Romance was taken in the Isle of Avalon, in a holy house of religion that standeth at the head of the Moors Adventurous" [i.e., the moors round Glastonbury], "there where King Arthur and Queen Guenievre lie, according to the witness of the good men religious that are therein, that have the whole history thereof, true from the beginning even to the end." This version, as will be seen below, contains indications of an Arabic origin.

As regards the date, or dates, of the story itself, the legend implies that the action takes place in the second half of the first century, about A.D. 75. This is taking the date of the Crucifixion at A.D. 33 and adding to it the forty-two years of Joseph's imprisonment. This accords fairly well with the portions referring to the Christianising of Egypt, which may have begun in the latter part of the first century; but the history of Egypt under Vespasian and Titus shows that the country was at peace, therefore the war between Evalach and Tholome cannot belong to the same stratum. It is a very noticeable fact in the long history of Egypt that whenever there was no central government, or when that government was weak, the country

tended to split up into small states, all more or less at war with one another. When a powerful ruler arose in one of these small principalities and succeeded in conquering his neighbours and annexing their kingdoms, Egypt became a united whole, only to sink again into petty princedoms when the strong hand was relaxed. The war between Evalach and Tholome is evidently one of such internecine wars, following hard upon a similar war in which Evalach had taken part in his youth, when he had been rewarded by obtaining the kingdom of Sarras. From this part of the story, though evidently historical, we can obtain, then, no indication of date, for even the weapons and methods of fighting might belong to any period. The name Tholome also shows only that the form in which the story was told was later than the Ptolemaic era, for a king of a reigning house would not be made into the villain of the piece, but it is no proof that the story itself was so late. As it stands, the description of the campaign might belong to any period of Egyptian history; even the white knight is not necessarily Christian, but might be Horus, whose attributes were taken over by St. George.

The second part offers a piece of negative evidence in the fact that Josephes at his consecration stands free except for the angels holding his arms; whereas from the ninth century onwards, the patriarch was brought in chains to his consecration. Therefore, this part of the story, at any rate, dates before the ninth century.

In the third part of the tale, there are perhaps the clearest indications of date. An account of Pompey's war upon, and destruction of, the Cilician pirates is brought into the chapter concerning Mordrayns' Rock in which the defeat and ghastly fate of the pirate Fowcairs is detailed at length. A fairly sure date, however, is given by the mention of the Persians. These come into the story twice: first, where two ships containing the Persian king and his soldiers, on their way to a campaign in Syria, are driven by stress of weather to take refuge at Celidoine's Island; second, where the messengers find at Alexandria the king of Persia's daughter in a ship full of dead Persian soldiers. There were two Persian wars in the Eastern Mediterranean in the early centuries of the Christian era. In the first, the Persians invaded the Delta at the end of the fifth century; in the second, the Persians under Chosroes II held Egypt for ten years, about 616 to 626. invading Egypt Chosroes II had conquered Syria, and it is said that he was there converted to Christianity. In the legend King Labell is on his way to fight in Syria, and he also becomes a Christian. We shall not then be far wrong in putting the third part of the legend at some period after the first quarter of the seventh century.

There is also another point which may help to fix the date, if, as I suppose, the Book of Melkin was the origin of this legend. In this Book Christ is spoken of as "the prophet Jesus." In the Perceval le Gallois the same expression occurs also: "All these" [i.e., Alain li Gros and his brothers] "died in arms in the service of the Holy Prophet that had renewed the Law by his death" (Evans, High History, I, I). And when King Arthur has had the vision of the Real Presence, the hermit says to him, "God grant you may amend your life in such sort that you may help to do away the evil Law and to exalt the Law that is made new by the crucifixion of the Holy Prophet" (id. ib. I, 8). This is not the epithet that a Christian would apply to Christ, but it is precisely the name by which a Mussulman would speak of him. In the Koran, "Jesus, the son of Mary," is mentioned several times as one of the chief prophets of the world, to whom signs and wonders were vouchsafed, but his divinity is explicitly denied as the following quotations will show: "To Jesus, son of Mary, gave we clear proof of his mission, and strengthened him by the Holy Spirit" (Sura II), "In the footsteps of the prophets caused we

Jesus, the son of Mary, to follow, confirming the law, which was before him" (Sura V), "Jesus is no more than a servant whom we favoured, and proposed as an instance of divine power to the children of Israel" (Sura LXI). This, then, seems to show that the Book of Melkin dates after the Arab Conquest in 641. The phrase "the prophet Jesus" occurs in John of Glastonbury in the story of the Soldan and the captive crusader: "At last he asked, among other things, if he had knowledge of a certain island, situated between two mountains, where rests Joseph ab Arimathia, the noble decurion, who took down the prophet Jesus from the cross." Here the epithet is quite rightly put into the mouth of a Mahomedan, and shows that in the previous quotations the epithet has been derived, possibly with the rest of the story, from an original in which Mahomedan influence occurs.

Reviewing the whole question of dating, it is very clear that we have here a collection of stories and legends of various periods; of which some, such as the story of Pompey and the pirate, date to before the beginning of the Christian era; some, as the account of the Persian king's conversion, to the seventh century. form in which the story is cast is, in its discursiveness and piety, closely allied to Arabic literature; many of the names are Arabic; and if, as seems possible, the name of the whole collection of stories was the Book of Melkin, then they must have been originally written in Arabic, the Arabic name being retained when the manuscript was translated into Latin, though its meaning was lost by later copyists. This would mean that the date must be after the rise of Mahomedan power in the seventh century, but a limit to a late date is set by the mention of Melkin in Asser's Life of Alfred. Therefore the date of the Book of Melkin lies between the latter half of the seventh century and the earlier half of the ninth. This would bring it to the eighth century, a very likely date in view of the fact that, according to Wolfram, there was an Arabic original for his version of the legend. The Moorish conquest of Spain took place early in the eighth century, after which Arabic manuscripts must have come into Europe. If then there were, besides, a tradition, or possibly even a record, of early Eastern connections at Glastonbury, the Arabic manuscript there would naturally be supposed to refer to, and to be a legacy from, the early period. But that the early part of the eighth century was the date at which the Grail legend, in its connection with Joseph of Arimathaea, began to be current is shown by a statement in Helinand's Chronicle under the year 720. "At this time a certain marvellous vision was revealed to a certain hermit in Britain concerning St. Joseph, the decurion who took down from the cross the body of our Lord, as well as the dish in which our Lord supped with his disciples, whereof the history was written out by the said hermit and is called Of the Graal." The eighth century is also given as the date of the hermit's vision in de Borron's Joseph. "Il auint apres la passion ihesu crist. vij. cens & . xvij. ans ke ie, li plus pechieres des autres pecheours, me gisoie en . j . petit habitacle endroit ichele eure ki est apielee la tierche vigile de la nuit" (Lovelich, Hist, of Holy Grail, Early Eng. Text Soc., XX, p. 4). This is also very nearly the date " of 'seaven hundred and eleaven' when the Constantinopolitan Prince" Congar came to Congresbury in Somersetshire, and there planted his staff, which grew into a tree.

In the eleventh century much of the dogmatic portions must have been added; but whether the additions were made in the Latin or were the work of the French translator there is nothing to show.

I am well aware that in the foregoing essay there are many debatable points which require more study; but, in spite of these I think I have proved the point

which I set out to prove, namely, that that portion of the Grail Romance, which relates to Joseph of Arimathaea, is Egyptian in origin.

APPENDIX.—The quotation from the *Book of Melkin* which is given by *John of Glastonbury*, ed. Hearne, 1726:

"Insula Avallonis avida funere paganorum, prae ceteris in orbe ad sepulturam eorum omnium sperulis propheciae vaticinantibus decorata, et in futurum ornata erit altissimum laudantibus. Abbadare, potens in Saphat, paganorum nobilissimus, cum centum quatuor milibus dormicionem ibi accepit. Inter quos Joseph de marmore, ab Arimathia nomine, cepit sompnum perpetuum; et jacet in linea bifurcata, juxta meridianum angulum oratorii, cratibus praeparatis, super potentem adorandum virginem, supradictis sperulatis (or speculatis) locum habitantibus tredecim. Habet enim secum Joseph in sarcophago duo fassula alba et argentea, cruore prophetae Ihesu et sudore perimpleta. Cum reperietur ejus sarcophagum integrum illibatum, in futuris videbitur, et erit apertum toto orbi terrarum. Ex tunc nec aqua, nec ros coeli, insulam nobilissimam habitantibus poterit deficere. Per multum tempus ante diem judicialem in Josaphat erunt aperta haec, et viventibus declarata. Huc usque Melkinus."

This statement occurs twice. On p. 30 it is preceded by: "Unde quidem Britonum vates, nomine Melkinus, ita exorsus est"; and on p. 55 by: "Ista scriptura invenitur in libro Melkini, qui fuit ante Merlinum."

M. A. MURRAY.

THE QUEENLY TITLE, XXIIND DYNASTY.

THERE has been much confusion between various princesses and queens of the XXIInd dynasty, owing to a close similarity of their names. As it is very unlikely that half a dozen different queens should all have the same name, the repetition suggests that this is rather an epithet, or title, than a name.

The various forms are:

Sheshenq I, wife, M.S., XXXI	
Usarken I, wife, L.A., XV; A.B., XIII	⊙ ∐ β □
Takerat I, wife, L.D., 256-7, P.R., 39	
A.Z., XXXIV, iii	
Usarken II, wife, N.B., 52; Scarab	
Rec., XXII, 131	
Usarken II, daughter, N.B., 52	
Takerat II, daughter, L.K., 606	† U
Unplaced L.D., 256, b, c	
L.D., 256, f, g	
L.D., 256, h	
A.S., IV, 183-6	操业

At that age was sounded as or or in was Karimat or Karimot.

Thus the regular title of a princess or queen of the Shishaks was the same as the Arabic for a princess, it. Originally meaning the "generous," and hence the "noble" or "gracious one," from kerim, it is the epithet for a princess, still maintained in Turkish use, and has now become the usual polite word for a daughter in Egypt.

How a Semitic epithet should come into regular use in an Egyptian dynasty, is obvious when we recognise the origin of the name Sheshenq. Shushanqu, "the man of Susa," coming from Semitic Babylonia, naturally kept a familiar title of his home for the princesses of the family.

W. M. F. PETRIE.

PERIODICALS.

Zeitschrift für Aegyptische Sprache, LII, 1915.

Schäfer, H.—Einiges ueber Entstehung und Art der Aegyptischen Kunst. Prof. Schafer has written a long and sympathetic article on Egyptian art. shows that the prehistoric reliefs,—which are so unlike anything that comes later as to have been set down as foreign by even trained observers,—are really the first examples of Egyptian art from which the later characteristics develop. He instances the Paris slate-palette with the bull as the principal example of the early art, and compares it with the palette of Narmer, later in date, and combining the characteristics of archaic art with some of the forms of the "typical" Egyptian art. He then proceeds to argue that true Egyptian art really comes into being about the IInd or IIIrd dynasty; and that from that period down to the Ptolemaic era, all works of pure Egyptian art have something in common which differentiates them from the work of other nations, so much so that anyone, with only a small amount of expert knowledge, could identify a piece of Egyptian sculpture even though found in the heart of Babylonia. Yet the early Egyptian reliefs are not unlike those of ancient Babylonia and Assyria. Thus in Egypt, on a slate palette, there is a scene of a battlefield, full of vivid and ghastly detail, like the vulturestela of Babylonia and the Assyrian representations. But when the art is fully developed there is no resemblance. In the battle-scenes of the Assyro-Babylonian sculpture we can almost hear the rumbling of the heavy wagons and the thunder of the hoofs: we feel with the soldiers the toil and labour of their profession. Egyptian representations, the light chariot of the son of the god flies over the field of battle, while he casts down in great swathes the enemy who fly like sparrows before a hawk: it is the very poetry of the battlefield. Thus the Assyrian excelled in the expression of force, which is apt to give the impression of gloom and ferocity, while the Egyptian art developed a symmetry and humanity, an expression of an inward greatness, to which the Assyrian never attained. In all art there is a continual battle between the creative and the imitative, and the problem is to combine two forces so utterly opposed. No artist, no period, can offer a solution which will avail for other artists and other periods, but the Egyptian obtained a solution of a kind. Taken altogether it is not too much to say that in all antiquity there are no other people, except the Greeks, who so deserve the name of artists as the Egyptians. Prof. Schäfer sets the highest point of development in the XVIIIth dynasty, for there we have the most varied material, and art is so much a principle of the life of the entire nation that it penetrates everywhere, and in the hands of the artist everything takes on an artistic form, down to the implements of daily The foundation of the character of Egyptian art was laid in the Hnd and IIIrd dynasties, and it is advisable to glance at the extraordinary creative power of the new forces then brought into play. The Paris slate-palette shows, particularly by the treatment of the muscles of the head and legs, that the archaic art was on the way to becoming fossilised. We see the remains of it in the reliefs on the throne of the Khafra statue, which cannot be reconciled with the rest of that statue if one is ignorant of archaic work. The new art then was a return to nature and

simplicity. And it is at this time also that the sublimely simple architectural form, the four-sided pyramid, originated. We have been told that this form is primitive and naturalistic, because theoretically so simple, and that it was derived from the shape of a heap of stones; but, on the contrary, it was the result of centuries of experiment on closely allied forms. Prof. Schafer contends that the priesthood had little or no influence on art, except where it pertained to the temples only. Even the reaction after the death of Akhenaten was due, not to the priests, but to the natural reaction of artists from an art which was degenerating into caricature. Far greater than the influence of the priests was that of the king. Under a strong ruler, prosperity, and with it all the arts of life, flourished in Egypt; and seeing what an extraordinary concentration of power was in the king's hands, it is not wonderful that his likes and dislikes can be observed in the art. It is not for nothing that the Egyptian architects and artists say, in their own biographical inscriptions, that they had been educated by the king, or had received their instruction from him. Therefore we may speak of a style of Thothmes or of Rameses, just as we speak of a style of Louis XIV. One very remarkable example of the personal relation of the king with art is found at certain times, as under Amenhotep III and IV, when the lineaments of the king are blended with those of his subjects. Although Egyptian history covers a long period of time, the art follows a normal course of development. First, a long period in which there is hardly any art worth the name; then a period of archaic art, which has often great charm. At the end of this archaic period, a few generations of artists, favoured by circumstances, reach a height, which is never surpassed later. Their works establish, at one stroke, the rank of that nation in the artistic history of mankind. nation has found its artistic speech. All later art is then merely the consolidation of the ground thus taken by assault. The artist refines his mediums more and more, he learns to use them more quickly, and discovers new methods of applying them, but the works of the great creators maintain their place beside these late performances. When at last all new ways have been tried and the creative power of a people nears its end, the artist turns to the imitation of the early works and reproduces them, till by degrees the power is utterly extinguished, and, in the end, even technical dexterity is lost. Three other high points can be distinguished in the art-history of Egypt: the Middle Kingdom, the New Kingdom, and the Late Period. Three times, therefore, the art, with unexampled tenacity, raised itself from decay, for it is not true that the history of Egyptian art shows only a gradual decay from the Old Kingdom onwards. If, then, the theory is accepted that certain definite personalities were the creators of Egyptian art, the question arises as to where these artists worked. Our material is still too scanty to give a definite answer, but one may conjecture that it was Memphis, whose god Ptah was very early looked upon both as the artist of the gods, and as the patron of artists those early artists were it is impossible to say. In Egypt art has always been successfully separated from the individuality of the artist; hardly any work of art is ever signed, for the artist looked upon himself, not always to the advantage of his art, more as a member of a great corporation than as an individual personality. It is, however, worth noting that in the Late period, there was good historical knowledge of the works of Imhetep, the architect of King Zoser of the IIIrd dynasty. In Egypt, as clsewhere, genius could express itself in spite of all hindrance, and mediocrity could only work according to well-tested rule and line, which thus develop into rigid laws. Mediocrity can always be raised by good teaching to a high level, and this was especially the case in Egypt. It is these mediocre works

which flood our Museums, and it is the duty of all scholars to raise the great works of art out of the mass. The history of art should not be a history of mediocrity. The real history of a living art runs always in a narrow line, for it has to do only with the best performances of every period.

KLEBS, LUISE.—Die Tiefendimension in der Zeichnung des alten Reiches. (14 illustrations in the text). Miss Klebs has written an extraordinarily interesting paper on the methods used by the Egyptians to represent depth in their drawing. Of perspective, in our sense, they had none; conceptions such as the point of sight, vanishing points, and station point, were entirely foreign to them. All the objects they drew were in silhouette, and they represented, for example, two oxen walking side by side, as a silhouette with a double contour on one side, and with all the feet on the same level. In all drawing the difficulty is to represent an object of three dimensions on a surface of two dimensions; and without perspective the ground, whether landscape or building, is taken out of its horizontal position and set up on end like a wall. The Egyptian drew in this manner, arranging his scenes in registers, the nearest objects being in the lowest register, the farthest away in the highest. The first great step in advance as regards perspective is to represent the apparent diminution of objects in the background, and there is plenty of evidence to show that the Egyptians had made this step. Miss Klebs' paper points out the working of the Egyptian idea of perspective on these two lines: 1. the high horizon with distant objects at the top of the picture and near objects at the bottom; and 2. the diminution of objects at a distance. Thus a whole wall may represent a complete landscape; in the foreground is the Nile with boats; in the next register, i.e., farther away, is a swamp with clap-nets for birds; in a still higher register, is the firm ground where boats are built and fish are dried; in the top register, showing the greatest distance, is the edge of the desert with hunters following game. It is possible to find many examples of such scenes, in which all the registers belong to one another and make a complete picture. The difficulty of representing the deceased in the foreground as a spectator of the scenes which are primarily for his delectation, is overcome by the fact that everything is drawn in profile, so that by placing him at the side of the picture, he faces the other figures. Remembering that the position of an object, either high up or low down on a wall, represents its position in space, it is easy to see why harvest scenes are often represented in two registers, one above the other, rather than in a row along one register. The felled tree and the wine-press scenes are well explained by Miss Klebs. She goes on to show that the Egyptians understood the apparent diminution in the size of figures at a distance from the spectator. Thus, in a deserthunt gazelles in the background are represented smaller than those in the foreground, and in the wine-pressing scene the fifth man, who is the farthest away and therefore drawn higher up on the wall than the others, is also smaller in size. In the same way the registers decrease in size, the narrowest being at the top; and as the figures are drawn in proportion the larger figures are at the bottom, the smaller at the top. In scenes where the deceased views his flocks and herds, the small creatures, such as birds, are placed in the lowest register, and are drawn large, as being nearest to the spectator; while oxen and other large animals are placed in a higher register, and are proportionately smaller in size. A knowledge of perspective or foreshortening is also often seen in representations of the human figure. The usual method of drawing the figure was a profile aspect of head and face, the upper part of the body in front view, the lower part of the body in a position half-way between

the front view of the trunk and the profile aspect of the legs. It is amazing what variety of movement the draughtsman managed to express in spite of these limitations. Yet there are many examples of the profile aspect of the body, where the line of the shoulders is shortened and the line of the back is seen. Single limbs are sometimes shown of diminished size, as when a man sits with the leg which is farthest from the spectator, drawn up against his body; though here the Egyptian artist succeeded better with animals than with the human figure. The Egyptian, however, though he had rightly observed the apparent diminution of objects in the depth of a scene, did not venture to apply the rule to a stiff inanimate object, which is the same size along its whole length. The palpable reality of the size of such an object was to them an evidence against the truth of its apparent diminution; thus a tree or a pole was of certain height from top to bottom, a height which could not be diminished, even though the object lay on the ground and went inwards into the picture. "It was different with things which could move, with animals and human beings, who can stoop and squeeze themselves together, stretch out a leg or bend an arm. These the artist dared to draw as he saw them. He possessed a sure feeling for, and an empirical knowledge of, perspective, but had drawn no conclusion from his use of the diminution of objects, and had adduced no law of perspective."

REISNER, G. A.—Excavations at Kerma (Dongola Province). I. The first report gives an account of the excavations of 1912-13. The description of the site is given thus: "The basin falls naturally into two parts-eastern and western—each marked by a large mud-brick structure, called locally the 'Upper Defûfa' (the eastern one) and the 'Lower Defûfa' (the western one). We began with the lower or western Defûfa." The objects discovered around the Defûfa showed "a dated occupation of the site lasting from the Vth to the XVIth dynasties . . . the site of a considerable town, the seat of a garrison, a manufacturing and trading centre, and possibly a smelting place for the Um-en-Abadi gold mines," On the eastern side of the basin are a great number of stone enclosures noticed by Lepsius in 1844. Two of these enclosures were excavated, one measured 84 metres in diameter and contained 66 graves. These were all multiple burials, the chief body being that of a male; the subsidiary bodies were so arranged as to indicate human sacrifice, and their positions suggested that the victims had been buried alive. The other enclosure was rectangular and contained a small building of brick and stone, perhaps a temple. The walls inside were painted with figures of animals. The eastern Defûfa was much like this temple in character; just outside the front door was found an inscription on stone giving the date of the 33rd year of Amenemhat III. The objects found in the graves and in the small temple are of the same period, the time of the Hyksos. Though the scarabs, alabaster vases, and coffins are Egyptian, the great mass of objects are not Egyptian. Prof. Elliot Smith adds a note on the skull of a man.

II. The second report is on the excavations of 1913–14. The low mounds to the east of the eastern Defûfa were excavated; these were all burial tumuli of three main types. The most important find was the fragment of a life-sized statue of that Hepzefa, whose contracts with the priests of the temple of Siût are so well known. His tomb was one of those which contained sacrificed human beings. The cemetery ranges in date from the early XIIth dynasty to the Hyksos period; and the objects found were of Egyptian as well as of local manufacture. The eastern Defûfa proved to be a temple, the western Defûfa a fort. (See the summary of the full report on p. 86.)

NAVILLE, E.—Le grand réservoir d'Abydos et la tombe d'Osiris. 3 plates The excavation of one of the most mysterious buildings in Egypt is shortly described. The plan shows a rectangular hall divided by two rows of granite columns; round the sides is a tank for water, so that the inner part of the hall is an island; in the walls are small cells, originally closed by two-leaved doors working The centre cell, at the end nearest the temple, is pierced to form a door into an inner hall, into which there was no other entrance. Prof. Naville's conclusion is that the great main hall, built of enormous blocks, is of very early date, as early as the "temple of the Sphinx," or even earlier; but that the reliefs and inscriptions were sculptured in the XIXth dynasty on walls which up to then had been undecorated. The inner hall, however, he thinks was built by the king whose name it bears, Sety I. He considers the great hall to be Strabo's Well, though noting that Prof. Petrie had previously suggested this identification. He also accepts the identification of the building with the cult of Osiris, but prefers to call that portion excavated by the Egyptian Research Account the Menephtheum rather than the Osireion.

SETHE, K.—Zur Erklarung einiger Denkmaeler aus der Fruhzeit der aegyptischen Kultur. 3 illustrations. Prof. Sethe here explains some obscure points on two of the sculptured slate palettes. The first of these palettes has on one side a representation of six fortresses or fortified towns being destroyed by animals armed with the thoe. These fortresses are arranged in two rows: in the upper, the destroying animal is a hawk over the first fortress, the other two are obliterated; in the lower row, from right to left, are a lion, a scorpion, and two hawks together. Prof. Sethe argues that these creatures represent the king; thus the hawk, which heads the first row, is the earliest title of the king, and always stands first in the titulary, therefore here it is the first of the animals; the double hawk is a common title of the king in the 1st dynasty, perhaps as the embodiment of the two Horuses of Hierakonpolis and Buto. The lion, which heads the second row, is probably a representation, not a title, of the king, who in later times is often represented as a sphinx and is frequently called "Lion of the Battlefield" and "Fierce Lion." The creature, which attacks the middle fortress of the lower row, is a scorpion. There is a Scorpion-king known at the beginning of the Ist dynasty, a predecessor of Narmer and Aha, who is identical with King Ka, for the sign formerly read | | is now found to be the cursive writing of the scorpion. (This is impossible, as the sealing and the incised jars certainly read ka.) Prof. Sethe therefore sees in this palette a commemoration of a victory obtained by the Scorpion-king. Reverse side of the palette shows three registers of walking animals, and below them a number of trees and shrubs; Legge has recognised in these the booty of a victorious king. On the right of the trees is a bent staff,), stuck into a pile of earth. This is really the ancient name of Libya, which, in the Old Kingdom is written $\bigcup_{i=1}^{n} and reads Tinw$. The conclusion is that one side shows the destruction of the Libyan fortresses, and the other side the booty brought from that country. (This was pointed out by Prof. Newberry, in ANCIENT EGYPT, 1915, p. 98.) The second palette is the one which represents a battlefield with birds of prey devouring the dead. In the middle a gigantic lion tears an enemy to pieces. In this lion Prof. Sethe sees the representation of the king. Above, and to the right, are the lower parts of two figures, a prisoner with bound arms being driven forward

by a personage in a long garment, perhaps a goddess. In front of the captive is a peculiar object, which Prof. Sethe explains as the name of a country. The lower part of the object is a pile of earth, precisely like the pile of earth in which stands in the other palette, and therefore equivalent to the of the later hieroglyphs. The upper part of the object appears to be a bundle of reeds, but what sign it represents it is impossible to say owing to its present broken condition.

KEES, H.-Nachlese zum Opfertanz des aegyptischen Koenigs. 2 plates and 3 illustrations. This paper, as its name implies, gives some additional examples of the sacred dances. The Bird-running.—At Karnak there is a further example of the bird-running of Thothmes III, where Bast is the goddess; and another of Ramescs II, with the lion-headed Urt-hekau as the goddess. In the Late Period there is a bird-running of Shabaka usurped by Nectanebo II, and there is one of the Ptolemaic era at Edfû. The text of the last named is interesting as supplementing the text at Dendereh, hitherto the only one known. The parallelism of "image" and "ka" shows how nearly allied these conceptions were among the Egyptians. The bird is not a common offering like the goose, but is a special offering "in order to open the way." The new text makes it clear that the bird was the "image" of the divinity, who was originally Hathor. The Vase-running and the Oar-running.—There are numerous examples of the period of Sety I and Rameses II, in which one sees the origin of the faults and misunderstandings of later times. The Sedheb-running.—An important example is the representation of Thothmes III at Karnak, for it shows not only the two runnings, one for Lower Egypt and one for Upper Egypt, but also the return in the midst of priests, and the enthronement. The throne scene evidently occurs after the running; the king resumes the festival robes which he laid aside for the running, and is enthroned while sacrifices are offered to the god, to whom the running is made, Upuaut, Lord of the Two Lands. We meet here the same idea that is found in the coronation. the Sed-festival, and other ceremonies. The god, here according to ancient custom Upuaut, leads the king to the throne, gives him dominion, for which he receives sacrifices as a thank-offering from the king through the sem-priest.

Schaefer, H.—Kunstwerke aus der Zeit Amenophis IV. 26 illustrations. Prof. Schaefer divides this paper into two parts; in the first he deals with the examples of Tell el-Amarna sculpture now in the Berlin Museum; in the second with the sculpture found in a Tell el-Amarna sculptor's studio during the recent excavations. As an admirer of Akhenaten Prof. Schaefer looks upon that king not only as a great reformer, but also as a great artist, and instances the Hymn to the Aten to prove the point. He thinks also that Akhenaten, or Amenophis IV as he prefers to call him, "manifestly possessed a lively and cultivated aesthetic sense and he appears to have found soon a master-sculptor whose works and ideas were congenial to his lord." The well-known wooden head of a queen is definitely stated by Prof. Schaefer to be a portrait of Queen Tyi; the long chin and the haughty mouth being quite recognisable. The beautiful head of a child princess is well known as one of the best pieces of the period. The chief interest of the paper lies in the examples from the studio of the sculptor Thothmes. When the town was deserted after the death of the king and the downfall of his reformation, the works of art-which, more than anything else, bore the impress of Akhenaten's personality-were abandoned as utterly useless, and the sculptor's workshop was left full of pieces of the greatest interest. Of these by far the finest is the limestone statuette of the queen. The exquisite face with the pathetic childlike mouth shows how appropriate was her name Nefert-ythi, *Beauty comes*. The statuette ranks as one of the masterpieces of Egyptian art. Other fine pieces are the head of Akhenaten in limestone, part of the figure of a princess in sandstone, and a head of another princess. A great number of plaster casts were also found. Prof. Schaefer shows that plaster-casting had a great effect on the art, and that it was not a new thing at this period, but had probably been in use since the Middle Kingdom at least.

Moret, A.—Serdab et maison du Ka. M. Moret states a theory founded on an inscription of a IVth dynasty tomb near the Great Pyramid. The reading of the inscription should be "The two eyes of the ka-house of Ra-ur." He rejects the idea can mean, like the French regard, both glance and window, and that therefore the inscription refers to the opening from the serdab into the tomb chapel, the serdab being then designated House of the Ka. He considers that means the serdab itself. Thus the two eyes are represented over the false doors of the Old Kingdom, and in the Middle Kingdom on the left side of coffins and sarcophagi at the height of the eyes of the mummy inside the coffin. In both cases the eyes show the place where the eyes of the dead open to look upon the world of the living; the mummy in the sarcophagus, the statue in the serdab behind the false door.

ERMAN, A.—Saitische Kopien aus Deir el-Bahri. Ever since N. de G. Davies pointed out that the scenes in the Theban tomb of Aba were copied from the ancient tomb of Aba at Deir el-Gebrawi, similar cases of copying by Saitic artists have been sought for. There is one very clear case which has not been noticed, though the original and the copy are both well known and are situated close together. This is the tomb of Ment-em-hat, in which the scenes of sacrifice have been borrowed from the temple of Deir el-Bahri. In the hall of sacrifice, on the south side of the upper terrace of the temple, there are nine scenes of sacrifice arranged in three rows on each side of the door (Plate CVII of Naville's publication). The copyist could not use them in this order owing to exigencies of space, as he had room for only eight scenes; so he has left out both times the third scene of the middle row. He has so re-arranged the scenes that the lowest row of his original is placed first, the highest last, showing that he viewed the pictures from below upwards. But these alterations are obviously due only to considerations of space; otherwise he has copied the scenes with such slavish fidelity that the representations and scenes of the original can be accurately reproduced. It is therefore quite reasonable to suppose that other scenes in this tomb may have been copied from those parts of the temple which are now destroyed. It is also worth noting that the inscription over the offering bearers in the tomb of Ment-em-hat are practically the same as in the tomb of Aba; even the orthography is the same. Such a coincidence can hardly be accidental; the sculptors of both tombs must have copied from the same original, for we find that the artist of Aba's tomb has borrowed from Deir el-Bahri when his original at Deir el-Gebawi failed him. Copying from an ancient original is found throughout Egyptian history; the scenes of offering bearers are copied from earlier scenes: even the great text of the generation and exaltation of Hatshepsut are recognisable, by the language and spelling, as coming from a much earlier time. We have part of a similar inscription (*Urkunden*, IV, 258) which, though dating to the XIIth dynasty, cannot have been even then the original source.

Schaefer argues that picture writing among a Semitic speaking people develops into a vowelless script. A non-Semitic language does not produce a writing without vowels. As no picture writing is known as the immediate precursor of the Phoenician alphabet, he suggests that we shall find the most influential factor in the development of the Phoenician script in some of the neighbouring countries. He rules out the Cretan and Hittite, for, from what we know of them, vowels played a great part in those languages. In Babylonia-Assyria a picture-language is developed into a script by the Sumerians, a non-Semitic people; therefore, though used later by a Semitic people, it retains the use of vowels. The Egyptian them is the only language which has the necessary qualifications to influence what Prof. Schaefer calls the "inner form" of the Phoenician alphabet; for, as he points out, there is historical evidence to show that the inner and outer forms of a script can derive from different sources.

SCHAEFER, H.—Koenig Huni. The point which Prof. Schaefer wishes to make is that in writing this name the scribes of the Prisse Papyrus, the Turin Papyrus, and the Sakkara List of Kings, knew what they were about. He calls attention to the fact that the verb \(\bigcirc \frac{\lambda}{\beta} \hat{hwy} \) has another form \(\bigcirc \frac{\lambda}{\beta} \hat{hwny} \) Therefore the king's name may be written rightly with either form.

Schaefer, H.—Zwei Heldentaten des Ahmase, des Sohnes des Ebene aus Elkab. This interesting commentary is on two points in the warlike deeds of Aahmes, the son of Abana. The first deed is thus translated by Breasted: "One fought in this Egypt, south of this city. Then I brought away a living captive, a man; I descended into the water. Behold, he was brought as a seizure upon the road of this city (although) I crossed with him over the water. It was announced to the royal herald. Then one presented me with gold in double measure." It was evidently considered something unusual as the capture is given in detail. Prof. Schaefer takes "this city" to refer to Avaris, and then points out that $\frac{\mathcal{L}_{1}}{\Box 1}$. which Breasted translates Road has also the meaning Side; the translation would then run: "I brought in a living captive, a man. I went into the water; he was seized (by me) beside the city, I went (back) with him across the water. It was reported to the royal herald." It appears then that the city lay on one side of the river, the Egyptian legions either on the other side or in boats on the stream. Aahmes courageously swam to the enemy's shore, seized one of the hostile warriors, and dragged him, in the face of the foe, through the water back amongst the Egyptian forces. The king obviously recognised the valour of the deed by presenting a double reward. The second heroic act was in the naval action against the rebel , and was of the same character as the first. "I brought two warriors, captured from the ship of Aata." Here again he carried off his captives out of the midst of the enemy, and the reward was again unusual.

Prof. Schaefer adds another interesting interpretation of this inscription. The narrative portion begins with with the actual meaning is almost proved by the sentence which follows immediately: "While my father was an officer of King Sequenen-Ra." In fact, "I made my forms" is merely a high-flown way of saying "I was born," for m mut "as a man" is to be understood. In this connection the superscriptions of certain passages in the Book of the Dead are made clearer. Here the expression is translated "To make transformation into." Although this translation is quite possible, it must be remembered that a word does not always have the same meaning on every occasion. We see that in the Aahmes inscription it can mean, "To be born," and in the Book of the Dead it may well bear the same meaning. This is perhaps the true explanation of the famous remark of Herodotus concerning the transmigration of souls.

Grapow, H.—Zwei Fragmente ciner Handschrift des Nilhymnus in Turin. These two fragments found in the Turin Museum are supplementary to the already well-known texts of the Hymn to the Nile, and will be of interest to scholars.

ERMAN, A.—Die Bedeutung der Adjectiva auf-j. This is an important paper grammatically. It deals with the adjectives derived from prepositions, and points out that this form can often be translated as a relative. This from the information of the information of

PEET, T. E.—Can be used to negative sdmtf? In this paper Mr. Peet points out that the sdmtf form is not "a mere variant for the infinitive to be used when there is a change of subject," and he therefore argues that Blackman's view of the use of with sdmtf is not tenable.

SETHE, K.—Das perfektische Hilfsverbum wih in Demotischen und Koptischen. This is a discussion on the origin of the form as which is found in relative sentences in Akhmimic, et-ascotu, "who heard."

CALICE, GRAF F.—Das Wort . This word is generally translated "Infantry officer," but it could be translated "Foot soldier." It may well be the Nomen unitatis of the collective . "Troop." The root meaning of is not only "To inherit," but "To be rewarded, to be enfeoffed," so that a soldier is "he who is rewarded a liege man." Though this translation

holds good in many texts, it must be remembered that $\frac{1}{2}$ often appears as a parallel with $\frac{1}{2}$, when suny means "Officer of the chariotry." But suny is more probably the chariot soldier, and not the officer. The conclusion is that the word means "Soldier," used of all grades in the same way that we ourselves use it.

HOEHNE, G.—Drei Koptisch-saidische Texte aus der Koeniglichen Bibliothek zu Berlin. These three fragments are: I, a biography of Pachom of Tabenese; 2, a sermon; 3, speeches of Jesus to his mother. The first gives the story of the crocodile which surprised Pachom and his brother Iohannes on the banks of the Nile; the second is a denunciation of a heretic; the third is a fragment of an adoration of the Virgin.

MISCELLANEOUS.

SETHE, K.—The dating of the inscriptions of $\int_{-\infty}^{\infty} d^{n}$, son of $\int_{-\infty}^{\infty} d^{n}$, the chieftain of Hermonthis, can be accurately fixed by the example now in London, in which occurs the group $\int_{-\infty}^{\infty} d^{n}$. This can only be the throne name of Mentuhetep III written without the cartouche.

SETHE, K.—This is a short discussion on the derivation of the Greek Bios $\mathring{a}\pi\rho\acute{o}\sigma\kappa o\rho\sigma_{S}$ from the Egyptian $\uparrow \uparrow \uparrow$ or $\uparrow \stackrel{\frown}{\Box} \uparrow \uparrow$, with the meaning "Immortal life."

CALICE, GRAF F.—The word for "bed" or "angareb" is \(\) \(\) \(\) and it is found in an inventory of a peasant or artizan's house, showing that, like the angareb in Nubia, it was an indispensable piece or household furniture.

WIESMANN, H.—The combination of **peq**- with the qualitative is very rare, but in addition to **pequoo**rt and its dialectical variants only two other examples are known, **peqen**, and the one now brought forward **peqxhp**.

WIESMANN, H.—This, an interesting note on the origin of the word adobe, which means an unburnt brick dried in the sun. It derives from the Egyptian or or which becomes in Coptic Trobe, in Arabic From Arabic it passed into Spanish, thence it was carried to Mexico, and finally was adopted, still keeping its ancient meaning, into the modern speech of America.

REVIEWS.

Early Egyptian Records of Travel.—By DAVID PATON. Vol. I, 4to, 90 pp. 32s. 6d. 1915. (Princeton University Press, Oxford University Press.)

This is one of the carefully detailed books of reference, which we begin to expect from American scholarship.

The first volume covers the whole of the period from the beginning of the Ist dynasty to the end of the XVIIth. It aims at being exhaustive by giving a reference to every mention of a foreign country in any text of that early period. The texts are not all given in full, but in every case sufficient is quoted to make the quotation perfectly intelligible.

The book is not printed, but typed, and the typed sheets photographed; on looking at the elaborate tables the reader fully endorses the appreciation, which the author bestows on Mr. George Vincent Welter, who did this work.

The tables are arranged in vertical columns, and are carried across two pages. Thus, counting from right to left, the first column contains the geographical names mentioned in the text; the second, the translation of the text, the chief variant translations being also given; the third, the transliteration with occasional grammatical notes. The fourth column contains an elaborate transliteration, in which every sign, other than alphabetic, is numbered according to the numeration of the Table of Signs in Erman's Egyptian Grammar; it is thus possible to reconstruct the original reading of any word when the original itself is not at hand. In the fifth column, or series of columns, on the extreme left, are the references to every line of the quotation in the principal publications of the text. Every text is preceded by a short introduction, giving as far as possible all that is known and all that has been published on that inscription or papyrus.

The book is consequently of great value to all students of early geography and early history as well as to Egyptologists. To the last it is invaluable on account of the mass of accurate detail which it contains.

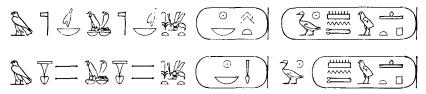
There are, however, a few arrangements which might well be amended in a second volume. Each text is comprised in a table, and each table is numbered; but beyond this, there is no system by which reference can be made to the pages; there are no page headings and no page numbers. The tale of Sanehat, for instance, covers twenty double pages, with introduction and text; but there is no means of distinguishing at a glance those pages from one another, or from the pages devoted to other texts. A book of reference should be essentially a book to which it is easy to refer, and the want of some method to make reference easy is a serious defect. The references to publications, given in the introductions, would be better in alphabetical order. The plan of the Palermo Stone has been placed sideways on the page without any reason; it would have been better to have placed it vertically.

As regards the transliteration and translation, there are a few emendations to be suggested. Amongst others, šit the name of the first season of the year, is now read 'isht; hrriw-š' is probably more correct than hrrw-š'; three out of the four Hebrew equivalents given are wrong letters; and the deity of wisdom, Seshat, is a goddess, not a god.

The Theban Necropolis in the Middle Kingdom.—H. E. WINLOCK. (From the American Journal of Semitic Languages and Literature, Oct., 1915.)

It is unfortunate that important papers are so often scattered in unlikely places. The present subject is neither Semitic, nor Language, nor Literature, but an important study in archaeology. The main new idea is that the large courts, with colonnades and tombs cut in their sides, in the Antef cemetery north of the Valley of the Kings, were the tombs of the earlier Antefs; also that the Mentuhetep temple of Deir el-Bahri, and another begun to the south of that, were enlargements of the same idea. A map of the Theban cemetery in the Middle Kingdom clears up the view, without the complication of the great mass of later remains.

The whole form of the XIth dynasty as discussed by previous writers is reviewed in detail, an excellent study of a complex subject. The whole of the monuments are considered, and this is a review of facts rather than mere opinions. One of the main questions is the history of the Deir el-Bahri temple. There two separate royal title-groups are found, and from their relation Mr. Winlock concludes that they truly represent two different kings, as follows:—



The first of these kings consolidated the Theban kingdom by the conquest of Herakleopolis, and ruled all Egypt energetically.

The second of these kings, in a reign of nearly half a century, strengthened the kingdom, and rose beyond all trace of barbarism in his work. He remodelled the Deir el-Bahri temple, so that the original form is obscured. Nebtauira Mentuhetep was his son and co-regent; Sonkhkara was the last of the dynasty.

Thus the whole dynasty is reconstructed as follows:—

- I. Nomarch of Thebes, Antef.
- 2. Prince Antef, son of Akua,
- 3. Prince Antef, of Karnak list, possibly one person.
- 4. Prince of Upper Egypt, Antef,
- 5. Horus Uah-onkh, Antef-oă I.
- 6. Horus Nekht Neb-tef-nefer, Antef II.
- 7. Horus Sonkh-ab-taui, Mentuhetep I.
- 8. Neb-hapt-ra, Mentuhetep II.
- 9. Neb-hept-ra, Mentuhetep III.
- 10. Neb-taui-ra, Mentuhetep IV.
- 11. Sonkh-kara, Mentuhetep V.

This reckoning does not account for Neb-hetep să ra Mentuhetep, whose Falcon and Nebti names are the same as those of No. 8. It also assumes the late date of Nub-kheper-ra Antef, which is flatly contradicted by the style of his scarabs, closely like those of Senusert I. Nor does it include Qa-ka-ra Antef. Also the king's son Antef of Shut er-Rigaleh is put down as a vassal of Neb-hept-ra, No. 9, although he has a cartouche and the epithet onkh zetta. A vassal of such importance between Thebes and Silsileh is very unlikely. There seems no reason for this Antef not having succeeded Neb-hept-ra. Thus we are by no means at the end of the difficulties about this dynasty.

A useful clearance of an error is made regarding the Antef pyramids. The common idea is proved to be entirely mistaken of a mud-brick pyramid, published by Prisse, belonging to an Antef; that being a Saite building at the mouth of the Assasif. Further, the brick pyramids on Drah abu'l-Naga are of the XVIIIth and XIXth dynasties. The only known locality of Antef monuments is shown to be the Antef cemetery, north of the King's Valley. Three great sunken courts, with tombs opening off the sides of them, are attributed to Antef I (by his stele, Antef II, and Mentuhetep I, by the relative positions on the ground.

From this view of the great tomb courts, with the king buried at the head, and the courtiers along the sides, Mr. Winlock passes to a resemblance in the temple of Mentuhetep II and III, with a long approach flanked by tombs of courtiers. Further, the plan and views are given of a great unfinished cutting and banking which ran up to a very similar position behind Shevkh Abd el-Ourneh, which suggests that Neb-taui-ra or Sonkh-kara was preparing a similar tomb in The tombs of courtiers flank the causeway, one being that very prominent colonnade on the top of Abd el-Qurneh hill; it is disappointingly blank owing to its being of the XIth and not of the XVIIIth dynasty. It is supposed that this royal tomb was not yet finished when the capital was transferred by Amenemhot I to Lisht. If this were so, then the unfinished tomb would be of Sonkhkara, and that of Neb-taui-ra is yet unplaced. There is a possibility, not yet suggested, that Hatshepsut used the site of an earlier temple, and reconstructed it; this might account for the temple and tomb of Nebtauira. Otherwise it might be worth searching in the valleys below the northern peak which is covered by Sonkhkara's sed heb temple, in case his tomb was placed below his temple.

This paper is the first well-reasoned view of the early Theban cemetery, and it suggests a whole system of researches on a scientific basis. The Government could not do better than put all Western Thebes under the direction of Mr. Winlock, with complete control of all excavations that may be undertaken there, so as to co-ordinate the entire work of different nationalities into a systematic whole, and solve the many historical questions that might be thus settled.

Bulletin of the Metropolitan Museum of Art. 10 cents, monthly. New York. June, September, October, November, December, 1915, February, 1916.

These recent numbers have special interest for Egyptian students. Last June there is an account, with photographs, of the heart scarab of Queen Amenardas. It was presented, with a group of small Egyptian objects, by a lady, apparently the result of tourist gleaning in Egypt about 1906. Happily it is safe now in the Museum. The body is thin and flat, like late heart scarabs; it is said to be of green porphyry; the cutting is very clear, though the forms are poor; the inscription is the usual chapter of the heart. The various ushabtis of this queen, cut in dark brown serpentine, have been known for many years; this heart scarab confirms the opening of the tomb in modern times, though its position is quite unknown to historians.

Another paper is on a group of gold pendants, between the XXth and XXVth dynasties. The seventeen rams' heads suggest the Ethiopian dynasty; there are also fifteen gold flies and six of the aegis of Bast or Sekhmet. With this journal is also a supplement on jewellery in the Museum. issued to encourage jewellers to study it. A fine complete bead collar of the XIIth dynasty is shown; but all the other jewellery is Greek, Cypriote, Etruscan, Roman, Byzantine, or later.

The September number gives an account of the educational value of the Museum. "All of the museums have been energetically spreading the news of their willingness to co-operate with the public schools, to help designers, and to assist members to a better understanding of their own institutions." There follows a list of forty lectures on various subjects, from two to six in a course. School handbooks on Ancient and European history are also being prepared. We may add that similarly Prof. Breasted, at Chicago, has been concentrating on preparing school manuals on history, and almost suspended his Egyptian studies in consequence. The United States will soon no longer look on the Old World as something detached and apart, but will have a keener sense of history than we have. An English scholar might contemn the popular style of some of the lectures announced at New York; but it is just because that education of the public has been despised here, that now the public cannot understand research, and will not further it, but sleepily agree to close our museums.

Other branches of museum activity are the lending of sets of photographs fully labelled, along with books on the subject of the set, to the Public Library, to spread general knowledge of them. Such sets, changed from time to time, will open many minds to regions entirely unknown before. Co-operation with High School classes is also actively worked.

Models of the most important buildings in the world, to a large scale of one-twentieth, serve to give reality to what would otherwise be only a bookish impression. Such a scale enables the minute detail of decoration to be shown, so that real study is promoted. There is a large demand for loans of lantern slides, 379 borrowers in the year. The most wanted were sets of pictures, next architecture, then ancient and modern life in different countries; while less required were sculpture, furniture, tapestry, etc. This is the way to reach a million people, from whom will come a thousand students, who may in turn produce ten men to seriously advance our general knowledge. Without such education of the public the position is almost hopeless.

The Egyptian section has advanced, with study rooms provided for the material and records required by students, keeping the open galleries for the education of the public.

The Museum staffs are the true educators of the public, and they understand their function at New York. Not only do they help the specialist, who knows exactly what he wants, but they help the vacuously minded to feed the smallest intellectual hunger, in order that the mind may grow by what it feeds upon. Let us always remember from what unpromising beginnings many of our greatest workers have come. A Murchison, a Faraday, a Rayleigh, a George Smith, have all been due to fresh impulses in their lives, which might have been expected to take quite different shapes.

The October number states the effect of the war in suspending American work in Egypt on excavation at Lisht, while the work at Thebes and copying of the Theban tombs under Mr. Davies was continued as before. A statement is made as to the artistic property of Mr. Theodore M. Davis, which he bequeathed entirely to the Metropolitan Museum of New York. This gathering was not only artistic in general but contained some of the duplicates from the discoveries of the Tombs of the Kings. It is an important addition to the public treasures of America.

The November *Bulletin* has on the front of it all that will ever be seen of the funeral figure of Nekht, whose tomb is so well known at Thebes. This figure had lain safe and perfect in the pit of the tomb until excavated last year. Despatched

on the "Arabic," with much else, it was sunk off Ireland by a German submarine. Since then nothing more is to be shipped to the New York Museum until the war and its perils are finished.

Mr. Davies gives an account of the interesting work that he has been doing on the Theban tombs. The great tomb of Surer was finally cleared; and this chamberlain of Amenhetep III is now seen to have provided for himself one of the finest of private tombs. After the front court is a hall with ten columns across it, and ten behind these. Then a hall seventy-four feet long with an avenue of ten



Figure of Nekht holding Stele of Adoration to RA. Found in his Tomb.

Sunk in the "Arabic."

columns on either hand. Behind that a hall with twenty-four columns; and finally a chamber with six columns containing the burial pits. The remaining sculptures are of the finest work of the XVIIIth dynasty; but unfortunately Surer had clung to the Amen party, and hence his tomb was mainly wrecked by the Aten party, and most of its decoration and furniture destroyed.

The well-known tomb of Puamra, with figures of the two obelisks and the architects, was cleared. The difficulties showed the extraordinary condition of

underground Qurneh. The rock is so honeycombed with passages, and these have been so often broken through from one to another, that when one is cleared the filling of the others runs down at all the breaks, and the whole neighbourhood begins to subside in patches like a salt mine district. The native dwellings crowded among the tombs soon felt the effects, and the subsiding occupants protested against such unseen dangers. The chambers in one part were three stories deep. The burial of Puamra was reached by a well in the courtyard, a sloping passage, two stairways and two intermediate chambers; the body had of course been long ago destroyed. The tombs of Userhat and Tehutiemhet were also cleared.

The bright and fresh little tomb of Nekht is one of the most popular of the Theban cemetery. This was cleared and the statue was found, whose loss we have above mentioned. The main work of Mr. Davies himself has been in copying, with assistants, part or the whole of seven of the painted tombs.

In the December number is an account of the excavations at Thebes on the site of the palace of Amenhetep III. The building uncovered has much the same arrangement as that for the king's own use, and it is supposed to have been for a queen or prince, perhaps part of a general quarter for the royal children. Much else still remains to be cleared in this region.

In the February number is an account of the moving of one of the mastabas of the Old Kingdom from Saqqareh to New York Museum. Not only there, but to several other countries whole mastabas have been removed; Berlin and Brussels show such examples. England—in charge of Egypt—has not a single specimen of a construction on such a scale.

Museum of Fine Arts Bulletin. Boston. December, 1915.

This number is occupied with a considerable account of the important excavations in Nubia by Dr. Reisner. This is in continuation of the work at Kerma, which we summarised in Ancient Egypt, 1914, p. 138. The further examination of the skeletons has shown that the chieftains who were found lying on couches in the graves were Egyptians, and the people buried with them were Nubians. Further work on the purely Nubian graves has produced burials of Nubian chiefs, in large circular pits with one to three women and from five to thirty goats. The Egyptian rulers extended this custom to having from ten to thirty human sacrifices. These burials were covered by tumuli of earth.

Three great tumuli far exceeded the others: these were found to be the burials of Egyptian governors of the Sudan during the Middle Kingdom. The greatest surprise was when one of these burials proved to be that of Hepzefa, whose immense rock tomb is so well known at Siut under Senusert I. In that tomb—now called the Stabl Antar—there are long contracts regarding the supply of offerings to his statues in the tomb. We now know that the magnificent sepulchre which he had provided for himself as chief of the nome, served only for his statues and ka offerings. He really died in his distant governorship, more than five hundred miles away, and was buried with all the regal barbaric pomp of the Sudan.

The tomb was an immense mound, three hundred feet across, outlined by a low wall. Across the circle, from side to side, ran a brick-walled corridor seven or eight feet wide. At the middle of this opened on one side the brick-vaulted burial chamber. After the funeral some three hundred Nubians, men, women and children were strangled and laid out along the corridor, which was, in fact, the antechamber of slaves before the tomb. With these sacrificed Nubians were

personal ornaments, sometimes pottery and, rarely, weapons. Over the whole mound was laid a coating of mud bricks; on the top a great pyramidion of quartzite, and probably a chapel for offerings, in which stood the statues of Hepzefa and his wife Sennu, which were found fallen down into pits dug by plunderers. The figure of Hepzefa had been much broken, only a stump of throne remaining: that of the wife was perfect. At the funeral feast over a thousand oxen were sacrificed, and their skulls buried around the great mound on its southern side.

Some time after the great burial, it was the custom to dig into the mound and line pits with loose bricks to serve as graves. In these were bodies lying on wooden couches with offerings. The whole mound, when it became weathered, was outlined with a band of dark stone chips, and sprinkled over with white pebbles.

In another of the great mounds was a statue of Khu-taui-ra, the first king of the XIIIth dynasty. Some fifteen or twenty large mounds, not quite of the vice-regal size, are probably the graves of other high officials and chiefs.

The objects found in these burials are of two classes, Egyptian and Sudani. The statues, the alabaster vases, the copper mirrors and knives, and some of the scarabs and pottery, are pure Egyptian. The bulk of the pottery—293 different forms—part of the scarabs, and the glazed pottery, was of local manufacture. The forms of the alabaster vases are what we know well to belong to the XIIth dynasty: large globular vases, drop-shaped vases, and trumpet-mouthed kohl-pots. One squat form has not been dated before. The copper mirrors are mostly of the type with two hawks below the disc, a head of Hathor between them, and a handle of plaited or braided wire pattern. The copper knives are, some, of the straight back style of the XIIth dynasty; but others are curved backward, and two have gazelle leg handles. If these are certainly of the Middle Kingdom they will give a useful date, as such forms have been attributed to the New Kingdom. daggers are all of the type with a large flat ivory handle, as Gardner Wilkinson, fig. 46. This form is rare in Egypt, and we may now gather that it is Sudani of the Middle Kingdom. No tools whatever were found, only daggers and personal implements.

The most surprising local product is the glazed pottery. As all over the site are the half-glazed pebbles used in the furnace floors, there can be no doubt as to the work being local. Many pieces of wasters of glazed ware also showed this. There is not only blue-glazed pottery, but also quartzite and quartz crystal with blue or green glazing. There were "bowls, pear-shaped and globular pots, cylindrical cups, jugs, rilled beakers, and covers, and kohl-pots; mace-heads, imitation shells, hippopotami, lions, scorpions, amulets, plaques, models of boats, figures of boatmen, inlay pieces, and tiles of many types. The inlays were used to decorate ivory boxes and sandstone ceiling slabs. The tiles were used to decorate walls and large pottery vessels. Parts of several lions in relief were found which had apparently been fastened on the walls of the temple in Mound II. The decorations on all forms of faience were in black line drawing on a blue ground." This latter reminds us of the hundreds of pieces of blue plaques and objects with black drawings found in the temple of Serabit of the XVIIIth dynasty.

The native pottery has some affinity with the prehistoric forms of Egypt, though no one piece could be mistaken as being of that family. Bird-shaped vases and spouted vases are like the older types. A tall beaker with wide spiral groove around it, and fluted below, seems evidently a copy of metal work, probably in gold. We are assured that the black pottery is polished with blacklead; as

the lustrous magnetite is extremely like blacklead, the evidences as to the material should be put beyond question by a chemist. Other little jugs, with incised patterns. are of the family so well known in the Delta graves of the Hyksos, and were probably carried to Nubia.

The seals of ivory with geometrical designs "are undoubtedly of local origin. The patterns are combinations of crossed lines, such as do not occur in Egypt." The whole of these certainly need careful study and comparison.

We greatly hope that Dr. Reisner will thoroughly publish all of this material, separating each group of objects which are certainly contemporary, such as those with the three hundred Nubian burials of one date. There will be thus a large extent of material by which to standardise our dating of the smaller arts. This discovery is of great value for purely Egyptian dating, as well as for the relations of Egypt and the Sudan, and the high and strange civilisation shown by the Sudani glazed ware and pottery.

The Rock Tombs of Meir. Part III.—AYLWARD M. BLACKMAN. 36 pp., 39 plates, 4to. 25s. 1915. (Egypt Exploration Fund.)

The continuation of this series is on the same complete plan as the previous parts; unfortunately, the diversity of scales is continued, the outline sheets alone being $\frac{1}{4}$, $\frac{1}{5}$, $\frac{1}{6}$, or $\frac{1}{7}$, while the five coloured plates are to four different scales. This needless disregard of scale is a serious hindrance of understanding the relation of parts in their positions and their sizes; it is hardly ever needful to change scales in one series, as see the copies of *Medum* and *Deshasheh*, each uniform.

The volume is entirely occupied by one tomb, that of Ukh-hetep, son of Ukh-hetep and Mersa, in the reign of Amenemhat II. The outline plates give all the subjects complete, but a key sheet is somewhat needed. Five coloured plates show the more interesting details, and the seven plates of photographs give general views and the better preserved scenes. The subjects of the scenes are not of the same importance as in the previous volumes, being all parallel to those in well-known tombs. The two new points of value are, (I) A charming piece of decoration, well given in colour, most nearly like a pattern in Prisse, Art, but simpler, and here well dated; and (2) The list of previous nomarchs.

The list of nomarchs is the first document, outside of the lists of kings, which carries through from the XIIth back to the Vth dynasty. It is, therefore, of value as historical evidence of the periods involved. In order to accommodate it to the arbitrary dating of Berlin, the average of rule of a nomarch is assumed by Mr. Blackman at 15 years, which is absurd for any such series. Though sometimes brothers succeeded one another in office, yet at other times sons died before their fathers and grandsons succeeded. The average of the Jewish kings is 23 years each, of the XVIIIth dynasty from Aahmes to Akhenaten 24 years each, of the English kings from the Conquest, 23 years. Such must therefore be accepted for a family succession of rulers, with an average of irregularities of all sorts. Accepting this general value, the fixed points in the series of nomarchs, and according to the chronology given by the Egyptians, is:—

```
BY KINGS' LISTS.
              REIGN.
                              B.C.
        Senusert I . . . .
No. 1.
                             3515
                                      = 3515.
No. 21.
        IX-Xth dynasty. .
                             3815
                                      = 3600-3900.
No. 36.
        Pepy II . . . . .
                             4320
                                      =4185.
No. 39.
       Nefer-khou. . . .
                            4415
                                      = 4405.
```

The last is the best fixed point, as the falcon name of king Nefer-ra (V, 5) is not in the least likely to be adopted later. Here we see that the list shows the general scale of the history to have been correctly given by the Egyptians themselves, and is one more impossibility in the arbitrary fancies of Berlin dating. The last two registers of the list appear to be of additional names, probably of rulers who were appointed outside of the family succession. No. 48 being probably of the XIth dynasty, and 58 of about the same time. Mr. Blackman is to be congratulated on having saved so much of what Egypt has done its worst to destroy in the last fifty years.

The Manchester Museum. Report for 1914-15.

A Museum Report is usually of individual rather than general interest. Here, however, is described an experiment which may well spread in this country. Many schools in Manchester were requisitioned for military purposes, and the scholars had to share half time in other schools. There were thus many children displaced for half their time. These have now been kept in hand by a system of elementary science and history teaching in the Museum. "Eight classes—of one hour's duration—are held daily, four by each teacher; two in the morning and two in the afternoon. Each lesson consists of from thirty to forty minutes' instruction in the class room, followed by a tour of the cases in the Museum dealing with the particular subject taught." Manchester Museum is particularly well fitted for such teaching, as there is a fine series of all the orders and principal species of animals, a fine series of fossils and minerals, and an unusually interesting and complete collection of Egyptian history and daily life. This is the true way to bring Museum knowledge into the common fund of information, instead of the "moral bankruptcy" of closing museums, for which we deserve the Continental despite.

Journal of the Manchester Egyptian and Oriental Society, 1914-15. 8vo, 63 pp. 1915. 5s.

Beside the current business and short reports of papers, this Journal contains some longer articles, especially pp. 27–48, by Mr. Peet, on "The Early Relations of Egypt and Asia." In prehistoric days the lazuli is doubted by Mr. Peet as coming from Persia, on the ground that it might be in the Eastern desert. As, however, it would be very unlikely that obsidian should be obtained nearer than the Aegean Islands, it must be granted that there was an extent of trade which makes the Persian route quite likely. The plaque of Den bears a figure which appears to be called an eastern. In Sinai, Semerkhet is shown smiting a Sinaitic chief. The 1st dynasty ends with the figure labelled with the place-name Setet. This name, however, may be either Asiatic or from the Cataract region; as the head is distinctly like the Libyan, it is more likely to be from the Cataract, where the early population had Libyan characteristics. Thus Den and Semerkhet show fighting over the Eastern frontier, but whether as far as Palestine, is not at all settled.

In the Old Kingdom Khufu records at Sinai the "Smiting the Anu," but the Anu seems to be a generic term for barbarians. Sahura in the Vth dynasty smites "the Mentu and all countries"; Ne-user-ra states the same. On his temple of Abusir are excellent typical figures of Libyans, Puntites and Asiatics. The same figures appear among the prisoners of Sahura, also two other types of bearded Asiatics. In the VIth dynasty Una records the defeat of the "Aamu who are upon the sand," meaning the desert between Egypt and Palestine, showing that the

Egyptian was not yet holding any of Palestine. These same Aamu extended down the Red Sea shore, as they were defeated when the Egyptians were building a boat to go to Punt.

During the VIIth to Xth dynasties an Asiatic invasion of Egypt can be discovered. Ameny = Amenemhat I is described as ejecting the Aamu, and building the wall across the Wady Tumilat to exclude them. In a papyrus of admonitions to King Merykara of the IXth dynasty, his father describes defeating the Aamu. A later papyrus, of Leiden, was probably copied from one about the XIIth dynasty, and it describes the foreigners in the Delta, and civil war throughout Egypt. All of this agrees with the archaeological evidence not touched by Mr. Peet. The abundant button seals begin in the VIth dynasty, and were mostly about the VIIth and VIIIth; their designs are always foreign, though often copied from Egyptian figures; and similar patterns have been found at Aleppo and Bismiyeh in Mesopotamia.

The Middle Kingdom knew much more of Palestine. Neb-hetep Mentuhetep figures captives of Nubia, Libya, and Asiatics; but whether the latter were still in the Delta, or farther out, is not stated. Neb-hept-ra Mentuhetep mentions fighting Aamu and Mentu Asiatics; this might yet be in the Delta. Under there is the inscription of Sebek-khu naming a war at Sekmem and the land of Retenu, where he fought with Aamu. This shows penetration into Palestine, though how far is not clear. A few other references to Asiatics do not take us any farther. The mention of Aam as a class of temple servants strongly suggests the taking captive of many of the Aamu; as in later times, Pakharu, "the Syrian," was a common personal name, like Mr. French in England. This paper makes us see how very uncertain is still our early geographical knowledge.

Prof. Rhys Davids discusses "The Beginnings of Religion." This deals with the broad question of whether we are to take the beliefs and practices of the less civilised races as typical of ancient thought, or whether we should take the study of an ancient religion as a basis. Prof. Davids begins by begging the question. "It is comparatively easy to decide which of these two methods is to be preferred," choosing himself the latter course, in opposition to the whole of the Tylor-Lang-Frazer school. The difficulty of realising the sentiments of modern peoples is taken as an argument against supposing that we can understand the barbaric and savage peoples of the present. But it is a far stronger argument against assuming that we can understand the development of any people of the past. The work of Foucart in favour of adopting our knowledge of Egyptian beliefs as typical, rather than any ideas of modern peoples, is upheld as the best type for such studies.

Now all this is part of a system of thought which has been far too prevalent recently, whether in economics, politics, history, religion, or many other departments. It is a habit of looking at the difficulties of one side of a subject, and deciding that it is impossible to accept it, and that therefore the opposite view must be true. It is a very specious method for those who do not know all the facts, and leads to a comforting self-assurance, which waives aside everything else that may be said. The only real road to a conclusion on any subject is to balance evidence. One side may be clearly improbable; but if the only alternative is still more improbable, or impossible, we must for the present accept the least improbable view.

In the study of comparative religion, whatever difficulty we have in entering into the thoughts of a modern man of another race, the difficulty is far greater if we try to understand an ancient man's thoughts. The modern can be watched in his

actions, he is not only known by some scarty remains; he can be studied over and over again, the evidences about him are not limited to a few discoveries or writings; above all he can be interrogated indefinitely to clear up questions, and often the more enlightened men will describe their own beliefs and practices in detail, whereas the ancient is dumb and can only be understood by what has chanced to survive to our time.

To take the documents that remain to us about any ancient religion, and ignore all the living parallels which explain them, would be like studying only the bones of fossil animals, and ignoring the parallels of living animals which show how the bones were worked by muscles, covered by tissues, and co-operated in the constant maintenance of the health and abilities of the animal. From a single bone much may be restored to view, of the construction and place in nature of the living structure now perished; but this can only be done by strictly comparative method, and utilising every analogy with present structures. So in the history of religious thought the one or two fossil fragments that we may have, about some class of ideas, can only be interpreted by the fullest comparison with similar thought still surviving, which can be analysed at leisure and cross-questioned in detail. It must be the modern examples which alone can restore to some similitude of life the ancient specimens.

Our knowledge of Egyptian practices is considerable; but we are yet very ignorant of the ideas and motives which lay behind those practices. How far the idea has perished while the practice continued, how far fresh ideas had arisen as false interpretations of the practices, whether we have ever yet grasped the idea at any period,—all this is yet quite vague to us. Take the most obvious matters, and see how blind we still are as to the meanings which must have been familiar to every Egyptian, about the ka, transmigration, intercession (on which an entirely new light has arisen, see our last number, p. 35, prayer, and influence of the gods. On any of these points five minutes' talk with an educated ancient would be worth more than all we now know. How can such fossil fragments compare in value with the full study that is made of any modern beliefs?

Thus the objection that the modern beliefs may not be correct interpreters for ancient times is a trivial difficulty compared with the obscurity of our knowledge of the past. The only logical course is to gather all we possibly can of the fossil practices, and then clothe them with a living structure of ideas by means of the nearest parallels in modern thought.

Prof. Elliot Smith states the supposed parallels between Egypt and other lands of "Oriental Tombs and Temples"; this is a statement of resemblances which does not carry conviction to most minds. When we read of a "temporary spiral causeway made for constructional purposes" round a pyramid, it is as well to warn readers that such statements have no accepted ground.

An encomium of the late Prof. Cheyne by Prof. Canney ends the number. Unfortunately his wild disregard of known history must react upon any consideration of the amount of reliance to be placed upon Prof. Cheyne's affirmations.

The Theosophical Path. Jan., 1916.

This Californian journal, with which we are regularly favoured, does not usually give scope for scientific criticism. We are the more bound, therefore, to notice some of the just and forcible remarks in a paper on *The Gift of Antiquity to Art*, by Grace Knoche. "When we consider that an evening might be spent with

profit upon a single nation of antiquity, a single period in that nation, or even upon a single statue, the topic assigned . . . seems broad in scope. The best that can be done, therefore, is to take a running glance at some of the great monuments of antiquity and remind ourselves of our supreme indebtedness to it—indebtedness for form as well as contents, for technic as well as *motif*. For modern art depends upon ancient art as one link hangs down from another in a chain.

"Examine whatever special branch you will, there, behind the modern effort stands the great art of the past, 'as one in eternal waiting.' And yet, although we copy and appropriate, there is always something that eludes us, and we have not gone beyond nor even reached the limits set ages upon ages ago

"We have never attained Egyptian understanding, nor Greek forbearance, in the juxtaposition of plain and decorated spaces. We have nothing in ornamental detail that yet can make superfluous the lotus, the acanthus, or the honeysuckle *motif*. We have never devised anything in continuous pattern that can improve upon the simple egg and dart, the simple astragal, the guilloche, the bead and fillet, the rosette and spiral patterns from the Beni-Hasan tombs."

Referring to the Persian tile-work frieze of lions: "Note the continuous pattern both above and below the lions, which we have appropriated without so much as a 'thank you,' and without improving upon it in the least. And this is but one of almost numberless examples, for, truth to tell, there is not a corner of the entire field of modern art that antiquity does not already hold in fee simple, the while we calmly appropriate and fix over for our own use—often a very commercial use—what we seldom acknowledge and frequently misunderstand. Go into any art school of standing and you will find ancient sculptures, not modern ones, set before students who are learning to model or draw. . . . What have we added to this heritage of beautiful forms? Nothing; while in the effort to be very original—having lost the true canons of proportion and knowledge of the old life and its laws—we have generated, in addition, a bedlam of bric-a-brac that posterity will only sweep away."

These are reflections which we hardly ever find applied as a counterpoise to modern vanity. We tacitly accept this position without venturing to put it into honest expression. All honour therefore to a writer who will say so explicitly what is the barrenness of modern productions.

The Athenaeum Subject Index to Periodicals, 1915.—Theology and Philosophy. 33 pp., 4to. 1s. 6d.

This is a sample of the various classes of subject indices undertaken by the Athenaeum. The issue of an annual index to papers in periodicals may be useful in some kinds of works; but it raises the question how far the world has time to turn back upon old weeklies and monthlies, most of the writing of which is ephemeral in its character. To the literary man who delights in personal detail as to the history of ideas in the present time, this index will be invaluable. As a curious feature it may be noticed that the Church at Rome (here called "Catholic Church") has seven times as much space as the Church of England, and half the papers referred to about the English Church are by Roman Catholic writers. A study in tendencies seems suggested by this omission of all the Church of England weekly and monthly papers, and the elaborate cataloguing of the "Catholic Church" under thirty-five different headings.

Notice sur la vie et les travaux de M. Georges Perrot.—GASTON MASPERO. Address to the Institut de France. 41 pp. 1915.

This biography of the late perpetual secretary to the Institut is a tribute from his successor to the memory of one of the principal archaeological writers of the last century. He was born in 1832, and brought up by his widowed mother and grandmother, in the quiet of home life, nourished on the Bible and the best of French classics, and learning English from reading Scott. His grandmother must have retained some of the spirit of France of the ancien regime, and thus contributed to the historical sense of the future writer. This was the surrounding to produce a scholar and an antiquary. After a brilliant schooling, he ransacked France in walking trips, and began his University training at the start of the Second Empire. The Ultramontanes then in power determined to reject him as a Protestant, and it was only by a friendly intervention with Napoleon that this intolerance was stopped. At twenty-three he succeeded in gaining a place at the School of Athens, after showing his ability in handling ancient inscriptions and modern Greek. In his new field he made a careful study of the inscriptions and history of Thasos; after which he returned to the career of University work in France. Three years there were cut short by employment in the researches upon the history of Caesar for Napoleon III. In that his great work was the complete copying of the testament of Augustus from the monument at Ancyra, smothered in Turkish houses. He further copied or took squeezes of five hundred Greek inscriptions, and for the first time photographed the Hittite monuments, then scarcely known. When these delightful days had to give place to routine teaching in France, he gave the classics a new life to his students by his vivid knowledge of the sites; he also opened the interest of archaeology to the public by popular writing in journals. The blow of 1870 fell upon him in Paris, where he remained in his position. His spread of the interest in his work resulted in 1877 in a new professorship of Archaeology at the Sorbonne. Soon after he met an architectural enthusiast in Chipiez, and from 1878 to 1901 they collaborated in the well-known series of volumes on the archaeology of many lands. These works have no doubt done much to put material before the public, and served as text books for students. This is not the place for criticism, but we may regret that the illustrations gave so incorrect an idea of ancient art-especially in Egypt-and were mixed with so much restoration which was unfounded. Fresh work came upon him as director of the École Normale, as editor of the Revue Archivlogique, of the Monuments Piot. and as a general writer on archaeology. He finally retired from his mass of professional work in 1903, to occupy the high dignity of perpetual secretary of the Académie. In 1914, at the age of eighty-two, he travelled in Italy with his grandchildren, and was looking forward to his golden wedding that summer, when mercifully a sudden death, amid his papers in his study, removed him on 30th June before the horrors of that autumn were even anticipated.

NOTES AND NEWS.

OUR English friends will be glad to hear that the American Branch has now been fully organised, under the Presidency of Prof. Breasted, who has long been recognised as the principal Egyptologist of the other hemisphere. The energetic management of Dr. Winslow has promoted the organisation, which includes seven vice-presidents, who are heads of Universities, Colleges, the Carnegie Museum, and the Archaeological Institute. In the large vitality shown lately in American research, it is well that our Research Account has thus taken a position which may lead to solid co-operation in the future.

A few months ago a paragraph appeared in the papers relating to the discovery of palaeolithic man in a cave in Egypt. Now there is nothing unlikely in such a discovery; it is a thing to hope for and to expect. Enquiries were therefore made of Dr. Ferguson, who was stated to have examined the skull. His reply is that the skull was found in one of the large quarry caverns in the Mokattam hill; and Dr. Ferguson found in the same place part of another skull with a small fragment of iron or steel bedded in it. The position in an artificial quarry, fixes the date to be after the IInd dynasty, when quarrying first began. Probably both skulls are of Roman age, or later.

In the paper in the last number on "The End of the Hittites," a slip has been kindly pointed out by Mr. Hugh Seebohm. In the discourse of Odysseus to Alkinous, he was recounting his previous tale to Achilles, concerning Neoptolemos the son of Achilles. It was therefore the son of Telephos, the king of Mysia, who had the Ketean companions, which is likely enough on the borders of Hittite power. The previous wounding of Telephos by Achilles was what gave point to the tale about Neoptolemos son of Achilles slaying Eurypylos the son of Telephos.

The safe return of Dr. Derry to England for a short time, from his Mediterranean hospital work, has much gratified his numerous friends.

Lieut. Engelbach, R.E., who left Suvla Bay on the evacuation, has been for some weeks in Egypt; he has since come to England, and after some needful rest is now stationed at Newhaven.

Second Lieut. Thompson, of the North Staffordshire, is now in Cairo, at the School of Instruction, Zeytun.

Second Lieut. North is also in Cairo.

Second Lieut. Lawrence is on the Intelligence Staff, Cairo.

Mr. J. E. Quibell, Curator of the Cairo Museum, a former student of the Research Account, is in the local defence corps in Egypt.

Mrs. Quibell—known in the Research volumes as Miss Pirie—is active in the Cairo canteen work.

Mr. Eric Peet is in service at Salonika, near Prof. Ernest Gardner.

THE PORTRAITS.

THANKS to Dr. Mercer, we have some illustrations from the Gorringe Collection, and perhaps the most interesting of these is the bronze portrait statuette of a Ptolemaic king on page 51. That it is a king is evident from the elephant's skin headdress of royal form, which was represented upon some of the Ptolemaic coins. That it is of the late Greek period is clear from the work. As such a figure is a new example of portraiture, Dr. Mercer kindly had a profile view of it taken, which is here given as one of our portraits.

Which Ptolemy this represents is not easy to settle. The earlier kings of that dynasty are fairly pourtrayed and recognised, but about the later ones there is a maze of uncertain suppositions, in which no two authorities find enough ground to agree. Most of the later coins only repeat the head of the founder, Soter, and portraits are rarely given.

The age of this king is a main guide: the sinking round the cheek-bone, the drawn lines of the face, the flabbiness round the eye, the pinched chin and nose, all show an elderly man, certainly over fifty, probably about sixty. The history is somewhat difficult to unravel, but from direct and indirect detail, it seems to have been thus:—

				BORN.	REIGNED.	DIED.	AGE.
_	~			В.С.	B.C.	В.С.	B C.
I.	Soter	•	•	36 <i>7</i>	325	283	84
H.	Philadelphos			308	285	246	62
III.	Euergetes I .			284	246	22I	63
IV.	Philopator .			243	22 I	204	39
V.	Epiphanes .			2 09	204	181	28
VI.	Eupator I .			190;	182	181	93
VII.	Philometor .			188	181	146	42
VIII.	Eupator II .			162	146	145	17
IX.	Euergetes II			171	146	116	55 Physkon.
X.	Soter II			142	116	81	б1 Lathyros.
XI.	Alexander I.			130;	106	88	42?
XII.	Alexander II			110;	81	81	29?
XIII.	Neos Dionysos			110;	81	51	59 Auletes.

Thus the choice of attribution is much limited by the age. As the portrait is clearly not Ptolemy I, II, III or IV, by the coin portraits, the age limits the attribution to IX, X or XIII, as all the others died a good deal younger. Of these three the IXth, Physkon, was—as his nickname shows—marked by his gross size, and fatness as shown on the coins, whereas this king is spare and strong. The conditions of the Xth, Lathyros, agree much more with the type we see here. Exiled to Cyprus by a usurper, after ten years of reign, he kept up his energy, and eighteen years later, at the age of fifty-four, he forced his way back to the throne of Egypt, and reigned there seven years till his death. He has the character for patience and amenity along with good fighting capacity; and that would agree

well to the type we see here. The age of XIII, Auletes, would place him in the running; but a man whose luxury and voluptuous life gave him the nickname of "flute-player," and the official title of Neos Dionysos, would scarcely frame to the spare, firm, determined old man we see here. Not much doubt then rests on attributing this bronze statuette to Ptolemy X Lathyros.

Mr. Hill has kindly allowed casts from the British Museum to supply here the best portraits of Ptolemy I Soter, and Ptolemy IV. The Soter head is the youngest type, and is given to compare with a head on onyx in University College, which has a bust of a Graeco-Egyptian king, which might be intended for Soter. From the Greek work, but purely Egyptian headdress, it is most likely to be of his time. The head of Philopator is given for comparison with a finger-ring of gilt bronze, in University College, which is certainly of the same king.

ANCIENT EGYPT.

EARLY FORMS OF THE CROSS FROM EGYPTIAN TOMBS.

It is generally agreed that the use of a cross by Christians as a symbol of Christ the Redeemer did not come into general use until the time of Constantine. It seems to have been early in use by the Egyptians, who adopted a form of the *ankh*, the Egyptian hieroglyphic sign which is sometimes called "the key of life," or "the life of the world to come," as a link between the old faith and the new.

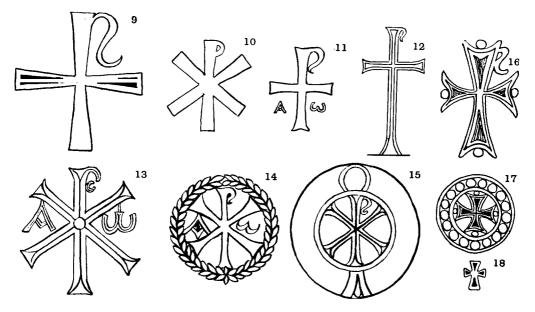
When the great temple of Serapis was solemnly destroyed by order of the Emperor Theodosius, there were laid bare "certain characters which they called hieroglyphics, having the form of crosses." The Christians claimed these as evidence that the great building had once belonged to their faith. But some of the heathen converts to Christianity who could read the ancient writing, interpreted the inscription. They said that the character resembling the Cross signified in ancient days "the life to come." They further declared that the writing was a prophecy, which, being interpreted, meant: "When the (character in the form of a cross representing) Life to come should appear, the temple of Serapis would be destroyed"; on hearing this, a great number of the pagans embraced Christianity and were baptized.

The crosses which follow are taken from early tombstones: some are from churches of the fourth and fifth centuries, and some are probably later; for as persecution waxed fierce in Egypt there came a tendency so to disguise the form of the cross that it should only be recognizable by the initiated. The curious observer may often detect these later concealed crosses in the ornament of mosques, showing that the architect who designed them was a Christian.

It will be seen that I have made no mention of what is called the Tau Cross, represented in most of the modern dictionaries as coming from Egypt. But this is because I have never seen it represented or described in Egypt, and do not know why it is represented as coming from thence. On the other hand I have no doubt in my own mind of the Egyptian origin, in design, of the early crosses found in Great Britain and Ireland, though most of these have the long shape which was (I think for reasons of disguise) early abandoned in Egypt for the square shape. In the sacred books of the Egyptian Church the cross generally has the long shape; it is on tombstones and mural decorations—in public places—that it becomes square.



No. 1. The ankh, with an ornament in the circle, and Alpha and Omega on each side. This form is, I think, peculiar to Egypt. I have met with the Horus cross in Greece and Italy, but not with the ankh, or, as some call it, the "key of life." Later on, the arms were elongated, as in No. 3, and this was said to indicate wings. In No. 2 the ankh is shown on either side of the cross with the lock of Horus; while No. 4 shows the ankh supporting three crosses. Nos. 5, 6, 7, and 8, are all, I think, later forms of the winged ankh.

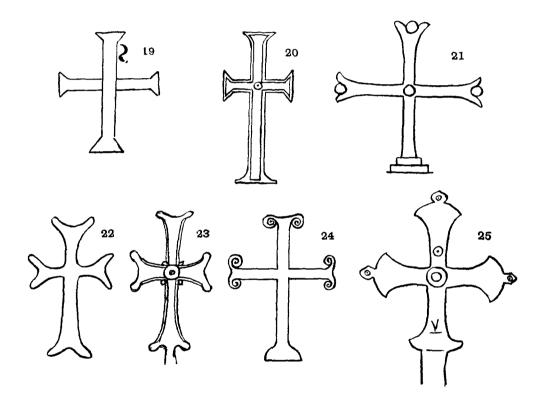


The sources of these are as follow:—No. 2, Cairo, 8551. No. 3, Cairo, 8561. Nos. 7 and 8 Cairo, 8567. No. 10, Cairo, 8412. No. 11, silver dish from Luqsor, Cairo, 7204. Nos. 12 and 13, on sarcophagi at S. Apollinare in Classe, Ravenna.

No. 9. Cross with the lock of Horus, denoting the Divine Son who overcomes the power of evil. The side lock was in ancient Egypt a sign of youth, and afterwards it became specially the mark of Horus, and hence of noble birth.

This is a very early form. When the labarum was adopted by Constantine I, it seemed to have been modified in Egypt, probably at a later date. No. 10 shows the standard of Constantine (see No. 47 in Prof. Petrie's Italian Crosses), No. 11, the cross with the lock of Horus, and No. 13, the standard with the loop turned into the lock of Horus. A reference to the Italian crosses will show the identical design at Ravenna, No. 55, and the cross with the lock of Horus, Nos. 62 and 63, while No. 64 shows the upright cross of the labarum proper. No. 12 is the Italian form.

No. 14. A form of the labarum (note the lock of Horus) encircled with a bay wreath.



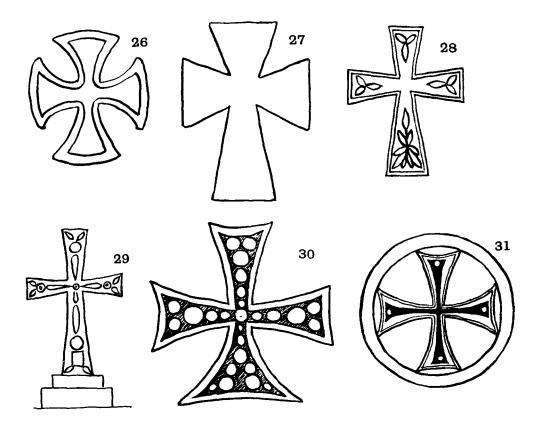
No. 15 is the late Italian form on the foundation stone of St. Mark's at Venice. Nos. 16, 17, 18 are a group of various forms of the cross which occur together on a single Coptic tombstone in the British Museum, stated to be of the seventh or eighth century.

Nos. 19, 21, 22, 23, and 25 show a different and more elongated form, with spreading ends. These, I think, are not earlier than the sixth and succeeding centuries. Compare with Nos. 20 and 24, which are Italian crosses. No. 19 is at Cairo, 8520. No. 20 is the cross held by Archbishop Maximian in the mosaic at Ravenna, A.D. 550. No. 22 is at Cairo, 8410. No. 23 is a bronze cross at Cairo, 9126. No. 24 is on the sarcophagus at Ravenna of Archbishop Johannes, A.D. 742, also on that of Archbishop Gratiosus, 788 (repeated, figure 132). No. 25 is a bronze cross from Abu Rowash, Cairo, 9176.

Nos. 26, 28, 29, and 30, show a slightly different form of cross, which is found everywhere after the fifth or sixth century. The ornamentation is inside the cross, sometimes engraved, sometimes jewelled. Compare with Nos. 27, 85, 98, and 99, among the Italian crosses. No. 26 is from the baptistery at Ravenna, A.D. 450. No. 27 at Cairo, 8411. No. 29 at Cairo, 8423. No. 30 at Cairo, 7329.

Nos. 31, 33, 34, 35, and 36 are all square crosses set in circles. The first two, in my opinion, are earlier than the others, and may be compared with Nos. 32, 69, and 76 in the Italian crosses. Nos. 34, 35, and 36, show the tendency to disguise the symbol of the Cross which is apparent in Egypt after the Mohammedan Conquest. No. 32 is from a sarcophagus at Ravenna. No. 33 from Ahnas, Cairo, 7350.

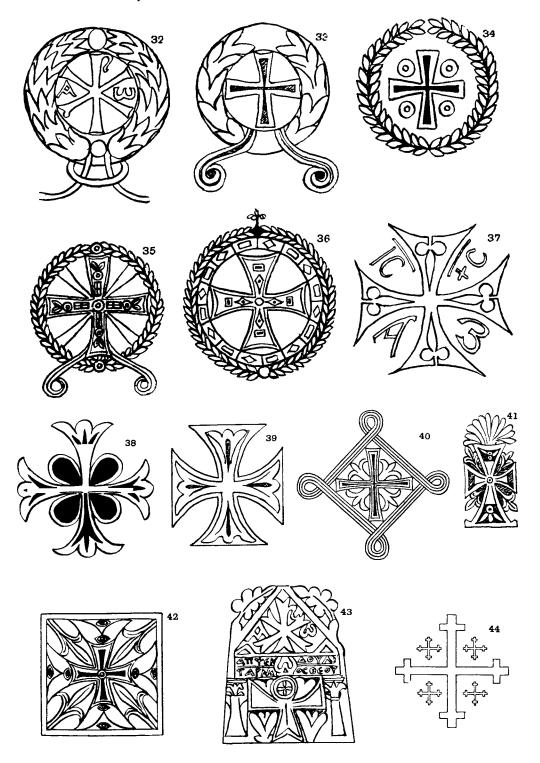
No. 34. Square cross with four double circles encircled with bay wreath.



No. 35. Square jewelled cross on stand, St. Andrew's cross behind, and wreath of bays.

No. 36. Square jewelled cross set in jewelled circle and surrounded by wreath of bays.

No. 37. Square cross with other Christian symbols. This is one of the most interesting of the crosses. It was found incised upon a pavement slab in a ruined church; and an inscription on the slab appears to say that it marked the place of the Holy Jeremiah, in the great church whose ruins Mr. Quibell excavated in the desert near Sakkarah, and where among other things he found this cross, which is now in the Cairo Museum. This is probably the Jeremiah for whom the Emperor Anastasius built a huge church in Egypt early in the sixth century, on the site of a small one which had been dedicated to St. Irai (Iras).



No. 38. Square cross with four petals breaking from the centre.

No. 39. Square cross with leafage ends; of the eighth or ninth century. (Cairo, 7299.)

No. 40. Square cross, with three pointed leaves breaking from the centre between the arms, and surrounded by coil of three-fold cord.

No. 41. Cross surmounted by lotus flower; three-pointed leaves breaking from the centre. Cairo, 8589.

No. 42. Concealed cross, set with the uzait, or mystic eye of ancient Egypt.

No. 43. Tombstone containing three different crosses, one with the lock of Horus, and one in the *ankh* cross. Cairo, 8602.

No. 44. The cross which is most commonly found on those restored Egyptian churches which are still standing, is really a group of five square crosses, like the one now called the Jerusalem Cross.

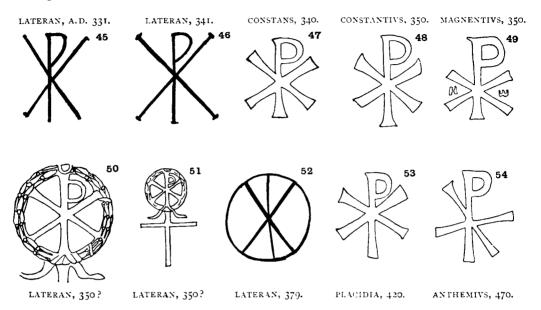
E. L. BUTCHER.

The interesting collection of forms of the Cross which Mrs. Butcher has contributed from her long acquaintance with Egypt, is an inducement to issue some material on the history of the Cross, which I had collected in Italy, about fifteen years ago. The cross form in Egypt cannot well be taken apart from the history of it elsewhere, for the changes were closely linked over all the Roman Empire; and as the Italian examples are better dated than those in Egypt, the order in course of time helps to show what was the course of development. Mrs. Butcher has already incorporated such of the Italian collection as seemed best to illustrate the connection with Egypt. Here, therefore, I shall trace what may be seen of the history of the changes of form, mainly on the following Italian examples, with reference also to those which have preceded this. One of the best sources of dating is the series of dated inscriptions in the Lateran Museum, many of which have a cross. It might be supposed that so obvious a subject had been exhausted already. But-to say nothing of various fanciful works-the treatise of Didron lumps all crosses before the eighth century as "of the earliest period," while spending pages upon useless quotations of poetry.

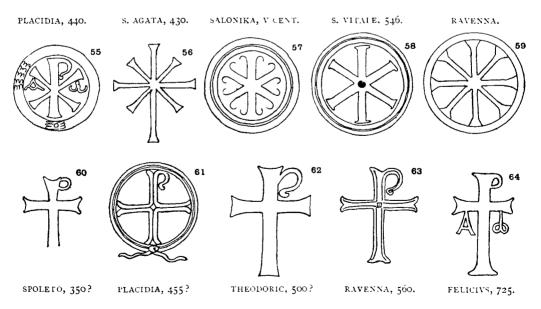
The earliest Christian symbol which can be dated is not the Cross, but the XP monogram (Nos. 45, 46). There is no question that this is the military labarum sign found on the Roman coinage as the standard, from Constantine onwards. This complicates the question as to the Vision of the Cross. The narrative of Constantine's vision closely agrees with the well-known parhelion, a cross of light radiating from the sun and extending to a circular halo. The vision was in the autumn, near the Alps, where frosty air would naturally supply the material of a parhelion. Another parhelion of the same kind is claimed to have been seen at Jerusalem in the next generation. I have even seen a mock sun—the most visible portion of a parhelion—in Middle Egypt. We should have expected the ensign to be a vertical cross in a circle; but this form does not appear in use until a century later (Nos. 61 and 69, A.D. 425).

The earliest form is the monogram of **XP**, and it seems as if there was some special reason for Constantine not adopting the cross, but taking instead the two leading letters of **XPIXTOX**, perhaps with some secondary meaning. Earlier occurrences of this monogram have been noted on coins of Tarentum and Bactria; but it is so likely a monogram to occur for many words and names formed from $\chi\rho\nu\sigma\delta$ s, that there is no need to suppose that it has a religious meaning before Constantine. The earliest example as a Christian symbol is said to be of A.D. 323. Here, in No. 45, is one dated to A.D. 331, in No. 46 one of A.D. 341, and there are other instances in the Lateran of A.D. 353, 358 (two), 362, and 382. (On the labarum, see Gibbon, ed. Bury, II, p. 567.)

The monogram on coins of Constans (about A.D. 340) is No. 47. The same is on coins of Nepotianus, A.D. 350. No. 48 is from coins of Constantius II, A.D. 350, and Jovianus A.D. 363; and with **A**, **W**, used by Magnentius A.D. 350. At about the same date it is found placed in a wreath on sarcophagi in the Lateran (Nos. 50, 51). A degraded form, No. 52, also occurs. The type continues with the next century,

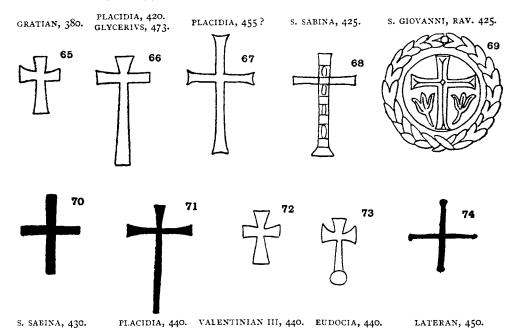


under Galla Placidia, A.D. 420 (No. 53), and Anthemius, A.D. 470 (No. 54). Placed in a wreath (No. 55) it also occurs in the tomb of Galla Placidia. Curious variations of monogram with a cross (No. 56) begin at S. Agata, Ravenna, in A.D. 430; these are found at Salonika (No. 57); S. Vitale, Ravenna (No. 58), in A.D. 546, and, perhaps, a century or two later at S. Apollinare in Classe (No. 59).



The second form to appear was the Cross with a loop at the top, generally considered to be the P of $XPI\Sigma TO\Sigma$, the X being identified with the Cross; No. 60 is of about A.D. 350, from S. Agostino at Spoleto. Soon after, this form

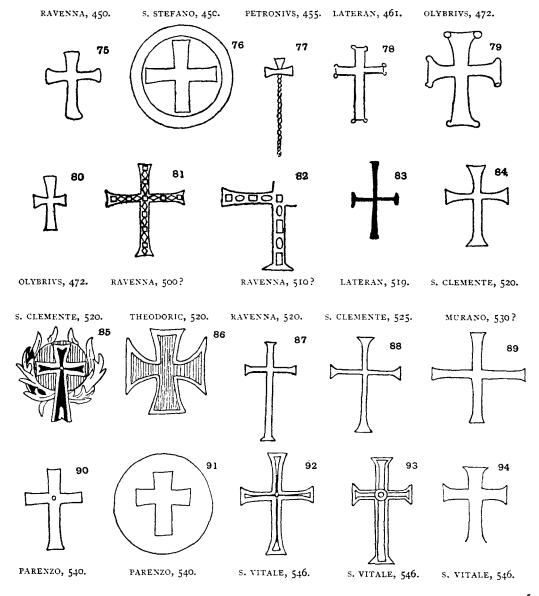
appears as a recurved hook, No. 61, on the sarcophagus of Honorius, A.D. 425, or, more probably, of Valentinian III, A.D. 455; No. 62, of Theodoric, about A.D. 500; No. 63, from S. Apollinare Nuovo, at Ravenna, A.D. 560; No. 12, of about the same age, on a sarcophagus at S. Apollinare in Classe. Now this was a staple form in Egypt, and it has been, with good reason, regarded as the lock of Horus attached to the Cross, an emblem of the Divine Son. No Egyptian examples can be dated as early as the fourth century, hence the form No. 60 seems to be the earlier. The Egyptian type is probably, therefore, an adaptation, but one which was spread largely in Italy, along with much else of Egyptian Christianity. This modification was also applied to the **XP** monogram, as in No. 55, from the tomb of Galla Placidia, A.D. 440.



We now reach the appearance of the plain cross. So far, a monogram of some kind had been the public emblem, and it is not till A.D. 380 that the Cross appears on the coinage, as No. 65, of Gratian. We do not know what the form was of the cross which is said to have been held by the statue of Constantine, or of that which he set up at Constantinople, or of the gold cross which he laid on the sarcophagus of St. Peter (last seen when laying the foundations of the present basilica)—all these are unknown. But, so far as the coinage and the labarum on the coins show, the plain cross appears in A.D. 380; it is next found in A.D. 420 on the tomb of Galla Placidia (No. 66); then (elongated above) on the sarcophagus of Valentinian III (No. 67). After that it is found jewelled for the first time in A.D. 425 at Sta. Sabina (No. 68), and, at the same time, placed in a wreath (No. 69) at S. Giovanni, Ravenna. The **XP** monogram in a wreath occurs rather later (No. 32) on a sarcophagus at Ravenna.

Another modification seen on coinage is placing a cross on a globe. This first appears under Valentinian III at about A.D. 440; and an example borrowed from the same design is No. 73 of Licinia Eudocia, about A.D. 450. Other examples of the simple cross are, No. 70 from Sta. Sabina in A.D. 430, No. 71 from the tomb of Galla Placidia in A.D. 440, No. 72 from a coin of Valentinian III, about A.D. 440; and No. 74 from the Lateran, about A.D. 450.

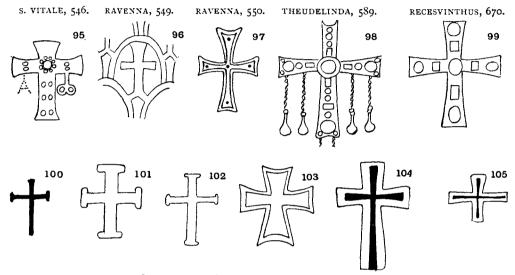
The simple cross was continued in the baptistery of Ravenna, A.D. 450 (No. 75). The equilateral cross, or Greek cross, an old Mykenaean emblem, was accepted (No. 76) at S. Stefano, Rome, between A.D. 440 and 461. A cross with a long twisted stem (No. 77) appears on the coins of Petronius Maximus (A.D. 455), and of Anthemius (A.D. 467). The beginning of ornamenting the angles is seen at the Lateran (No. 78) dated to A.D. 461, and on the coins of Olybrius (No. 79) of A.D. 472. It is notable that all of these crosses on coins belong to the Italian Emperor and not to Constantinople. The jewelled cross, which was started at A.D. 425, appears again about A.D. 500 in S. Apollinare Nuovo, at Ravenna (No. 81), and the Arian Baptistery about A.D. 510 (No. 82).



A tendency to widen the stem and arms to the end, came in at A.D. 520 at S. Clemente, Rome (No. 85) and the tomb of Theodoric at Ravenna (No. 86). Otherwise the fashion led to long thin parallel limbs with a sudden widening at the ends, as at the Arian Baptistery, Ravenna (No. 87), S. Clemente, Rome, A.D. 525

(No. 88), S. Donato at Murano, A.D. 530? (No. 89), and S. Vitale, Ravenna, A.D. 546, (Nos. 92, 93, 94). The plain-limbed cross appears—perhaps under Greek influence—at Parenzo in A.D. 540 (Nos. 90, 91).

At this point begins the decoration of the cross with various jewel patterns. The earlier jewelling was in restrained regularity, in accord with Latin feeling; the later jewelling is more of Oriental character, spotty and irregular, as No. 95 of S. Vitale, A.D. 546; the cross of Theudelinda A.D. 589 (No. 98), and the similar cross of Receswinth in A.D. 670 (No. 99). A curious instance of the cross is in the pattern of the bronze grating of the crypt of S. Apollinare in Classe, of A.D. 549 (No. 96). The widening of the top is like the contemporary cross on the ivory throne of Maximian in S. Vitale (No. 97).



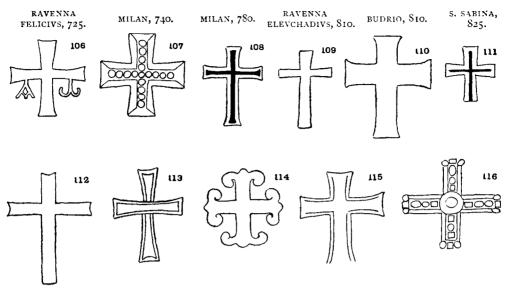
LATERAN, 557. S. LORENZO, 578. S. AGNESE, 630. VOLPICELLA, 712. VOLPICELLA, 712. PAVIA, 720.

The addition of cross bars at the end of the limbs of the cross first appears in A.D. 557 at the Lateran (No. 100); rather later, at S. Lorenzo, Rome, A.D. 578 (No. 101), and Sta. Agnese, Rome, in A.D. 630 (No. 102). This grew into almost a square enclosure around the cross, and was usual on the Byzantine coinage in the seventh, eighth, and ninth centuries. The splayed cross (No. 103) at S. Giorgio, Volpicella, of A.D. 712, is a clumsier form of that of Maximian (No. 97). The two incised crosses of A.D. 712, Volpicella (No. 104), and A.D. 720, Pavia (No. 105), are of similar style.

The same style recurs again in A.D. 780 at S. Vincenzo, Milan (No. 108), and in A.D. 825 at Sta. Sabina, Rome (No. 111). The thick-limbed cross was generally in favour in the later eighth century and the ninth. The jewelling is much coarser than before, as on the fragments of Sta. Maria d'Aurona at Milan of A.D. 740 (No. 107), and the cross of Berengarius at Monza, about A.D. 915 (No. 116). The fleur-de-lis terminals of the cross of S. Satiro at Milan (No. 114) are surprising for the date of A.D. 879.

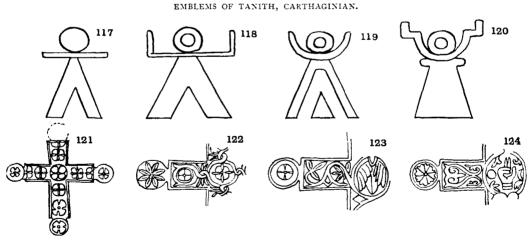
Here we may pause, at a break in the regular development, to note a remarkable type which was peculiar to Egypt, having a disc at the top of the cross arms. Mrs. Butcher has brought together a series of strange forms, Nos. 3 to 8. No. 1 may well have been a modified onkh sign, with its round head. In No. 2 there is the onkh quite distinct from the cross. But in Nos. 3 to 8 we have a type which cannot have come altogether from the onkh and cross, as the growth of the sides is

so marked. There was, however, in North Africa a most sacred emblem, that of the Punic supreme goddess, Tanith, shown here in Nos. 117 to 120. In this we see



BOLOGNA, 840. S. VITALE, BOLOGNA, 850. MILAN, 879. S. DONATO, MURANO, 880. MONZA, 915?

the wide arms turning upward, as in Nos. 4 and 5, and the splaying bases, as in Nos. 3 and 6 especially. It seems that these crosses—for they are undoubtedly Christian—have conformed as much to the claims of Tanith as to the *onkh*. How far the emblem of Tanith may have been derived from the *onkh* originally we need not here enquire. Sufficient is it that the two were quite independent when the Cross appeared, and that both influences modified the development of the Cross in Egypt.

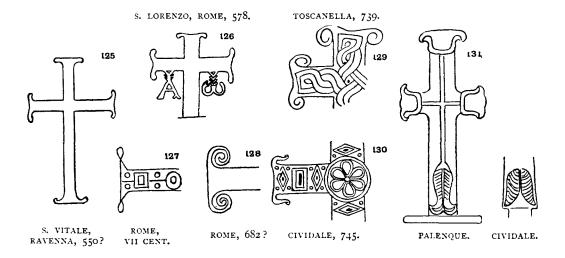


ARIAN CROSSES AT RAVENNA, 510; AND ALSO TORCELLO, 520.

The ornate type has been passed over in our historical series, as being a group by itself which we can best regard as a whole. The beginning of the elaborate ornament is in the Arian crosses at Ravenna of A.D. 510, Nos. 121 to 124. The symbolism of the hand in the centre, in the last one, is a recognized symbol of God the Father. These crosses all end in discs at each extremity, a feature quite

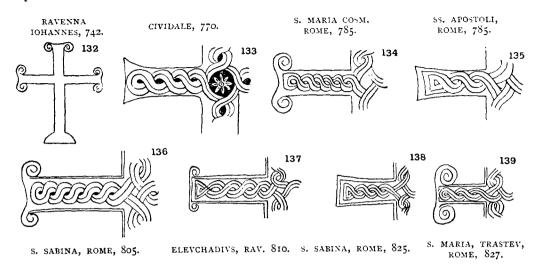
unknown before in the Italian cross. It seems as if it were influenced by the *onkh* and Tanith symbols, Nos. 1 to 8.

The crosses with decorated terminations begin at about A.D. 550 (No. 125) as on an altar at S. Vitale, and at S. Lorenzo at Rome about A.D. 578. At the same place and date such a cross has the A and W hanging from the arms (No. 126). In the next century this termination affects a jewelled cross, in the mosaic of Primus Felicianus, at S. Stefano Rotondo, Rome (No. 127), or forms close spirals at the ends as at S. Georgio in Velabro, Rome, of A.D. 682 (No. 128). This was continued into the age of the twisted patterns, as No. 129 at S. Pietro, Toscanella, of A.D. 739. Recurved hook ends appear on the latest of the jewelled crosses (No. 130) on the altar of Ratchis at Cividale in A.D. 745.

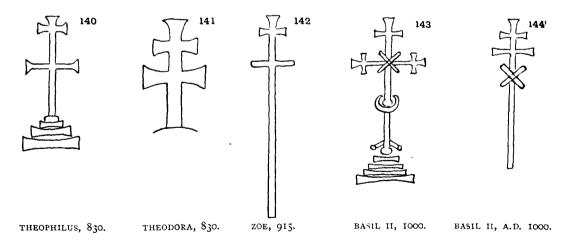


Here we may compare No. 131, which, by the form of its terminals, would naturally belong to the group of these crosses of the seventh century. The form of the foliation on the stem of the cross also belongs to about the same period, agreeing with a well-known style of about the eighth century, which may be compared in the stem pattern of the cross of Peltrudis at Cividale, placed at the side here. No. 131 is the celebrated cross of Palenque in Central America, there placed between two worshippers who stand adoring. At first sight the distance, and difference of surroundings, would seem to make any connection impossible; yet as the resemblance is purely decorative, it belongs to the best evidences of actual copying, unlike structural and utilitarian forms which may arise out of the same conditions and necessities. The purely artistic forms are always the best evidence of real connection. As this belongs to the type of cross in fashion in the seventh and eighth centuries, it would readily be the form carried by the Syrian mission to China, which began in A.D. 638, and was commemorated in the Si-ngan-fu inscription of A.D. 781. It is not impossible to suppose that a mission which had penetrated across the continent of Asia, from Syria to China, should have grasped at any hint of lands known beyond, and have penetrated by some means across to America. As the best opinion on Palenque is that it belongs to the twelfth century A.D., there is no difficulty in the transmission from China to America within the compass of three centuries. Certainly, future discussions of the source of the Palenque cross must take into account the connections of its ornament with that of the eighth century.

The twisted pattern—of northern origin—continued to be the usual decoration of crosses in the eighth and ninth centuries, as Nos. 133 to 139, generally with spiral ornament of the terminals.



In A.D. 830 a new development appeared in an upper cross arm, probably derived from the idea of the tablet of Pilate attached to the head of the Cross. The coins of Theophilus first show this (No. 140). It was modified as a double cross (No. 141), or with a long stem (No. 142) in 915. Next, under Basil II, A.D. 1000, a cross piece was added to each terminal, and a diagonal cross in the middle (No. 143); or the diagonal cross was added to a double cross (No. 144). Here we reach the many fancy varieties of form which blossomed in the Latin kingdoms of the East, and which by their variety and intricacy of ornament cease to have clear lines of descent.



Much more research is needed to follow each of the changes back to its real source; but this outline of dated examples will serve to show how various types were connected, and help toward dating monuments which bear figures of the Cross.

W. M. FLINDERS PETRIE.

[This article may be obtained in separate form, price 1s. 6d.]

CUTTING GRANITE.

THE apparent ease with which the ancients not only handled but cut so stubborn a material as granite, whether the pieces were large or small, can never fail to excite interest in those who have either visited the quarries at Aswân or examined the objects, large or small, which are still so common in Egypt or in museums.

It is not proposed in this short paper to show "how it was done" by the ancients, but merely to offer a few suggestions, and, by describing how the cutting has recently been accomplished, to demonstrate that the mysterious powers with which certain archaeologists have been pleased to clothe the ancient craftsmen may be after all quite imaginary.

Aswan granite is not very particularly hard as amongst granites. It presents the same conditions to the craftsman that are found in dealing with granites from most other localities. We can see for ourselves that the ancients divided the stone by means of wedges. What was the nature of the wedges employed is not so clear, nor the way in which they were made to fulfil their office. Some would have it that wooden wedges swelled by moisture were used; others that metal was the material made use of, and then the question follows: "What metal?" Others again suggest that fire was the agent and not wedges. It is to be regretted that the archaeologist, both of older date and of the present time, is often given to speculate on technical subjects, and even to lay down the law on matters of which he has not the least practical knowledge; hence follow remarkable results more amusing than edifying. May I myself be saved from falling into such a snare!

The object I have in view is to show how easy it was to cut large blocks of granite, and to prepare them for building operations in connection with the Great Dam at Aswân. Here was the same granite as was made use of by the ancients: here were large masses of the material under the same conditions as the masons had to deal with 5000 years ago, and the same lack of what we now call "tackle" to assist the masons in moving the blocks.

The work about to be described was, as far as work on granite in Egypt was concerned, somewhat experimental, and taken in hand so as to test the facility of "getting," and the cost of cutting the material: things most important to be known in calculating the cost of the colossal work of building the Dam.

I am so fortunate as to have at hand a full account of the proceedings given me by Mr. Courtney Clifton, under whose general direction, acting on behalf of the Public Works Department, the experimental work was conducted in the year 1895.

The stonecutters for the experiment were brought direct from Baveno in N. Italy, where are very extensive granite quarries. They found the granite but very little harder than the granite they were accustomed to work. Very large boulders were selected on the island of El-Hesseh, S.E. of Philae. The blocks required were large, 10 feet long, 3 feet 4 inches wide, and 1 foot 8 inches thick, weighing four tons. Smaller blocks weighing 3 tons each were also required. To get these blocks, a great boulder was chosen. This was divided by a vertical cut

"E" "F" (see Fig. 2), some 20 feet in length, passing along the top and two sides. This, the first cut that was made, employed eighty "plugs" or small wedges, and three groups of four heavy wedges. Each "group" consisted of two pairs of wedges placed side by side. The position of these "groups" is clearly seen on the photograph, Fig. I. The holes to receive the "plugs" were made with a form of chisel, known as a "point," with which, also, dressing of the surfaces of the stones was done; the "point" was, in fact, the only cutting tool used.

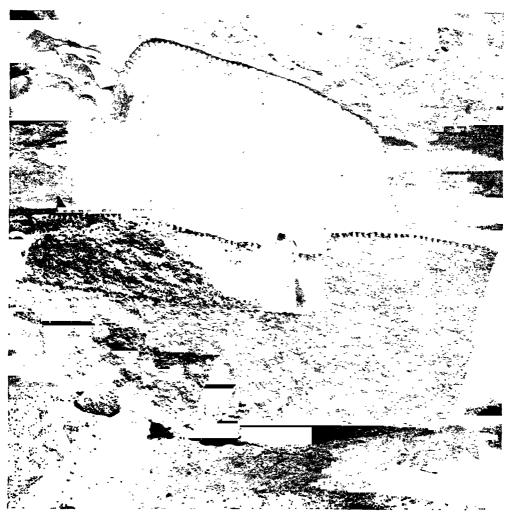


FIG. 1. GRANITE BOULDER AT ASWAN, SPLIT BY WEDGE HOLES.

The "points" were made on the spot from an hexagonal steel bar about $\frac{5}{8}$ inch diameter; 6 inches in length of the bar were cut off and drawn out by the smith to a blunt point. When ready for use, the "points" had become about 8 inches long, and had been case-hardened or tempered, as to their tips, by being plunged when red hot in cold water. The holes to receive the "plugs" were cut with such a "point," struck by an ordinary hand hammer about 6 lbs. in weight. The holes were from 3 to 4 inches apart and 3 to 4 inches deep and $\frac{5}{8}$ inch diameter.

My friend Mr. Clifton here makes a note calling attention to the fact that the plug holes were quite unlike the holes we see in the ancient quarries which are oblong, some 5 inches long and 2 inches or more wide. The photograph, Fig. 1, shows how numerous and small the plug holes are.

A shallow groove was made, to indicate the line wherein the plug holes should be sunk. This groove was cut through the hard skin formed by the action of the weather on the outside of the boulder. The few heavy wedges, before mentioned, were made of steel. These were about 15 inches long, $2\frac{1}{2}$ to 3 inches wide, and weighed some 20 lbs. The position in which they were employed is clearly seen on the photograph, Fig. 1. The large boulder was to be divided in the manner shown on the diagram, Fig. 2; only as much as was required to form the blocks of stone mentioned on p. 110 was to be cut off from it. The piece "G" was left standing. The lower part of the boulder was sunk to a considerable depth in the alluvium which had collected about the base. This was dug away on the side on which the masons were to work, so that, when divided, the detached part would roll over and rest in the hole there prepared. Having all things thus made ready, we now proceed to the business of cutting the boulder.

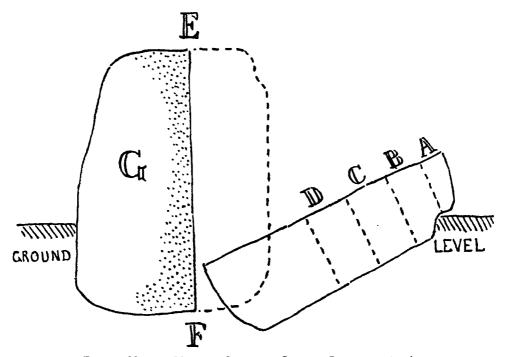


Fig. 2. Modern Mode of Splitting Granite Boulders, Aswan.

The "plugs" are placed in the holes prepared, into which they are jammed with a hand hammer. When fixed, they are struck in succession by two men swinging sledge hammers, each "plug" receiving one blow. When this succession of blows has been repeated three or four times, the fracture is probably completed and the mass detached. Sometimes, however, the crack does not follow the groove and line intended. As soon as this deviation is observed, the strikers break off the succession of blows and start again on a "plug" at some distance ahead. From the newly selected "plug" they work backwards along the groove, thus drawing the line of intended cleavage in the direction desired.

When the fracture was completed, the detached portion of the boulder, weighing some fifty or sixty tons, toppled over into the position prepared for it by digging the before-mentioned hole. See diagram, Fig. 2. Pieces "A, B, C, D" were cut off from the fallen mass, making use of the processes above described to effect the subdivision.

"Dressing" the surface of the blocks is done by a rather heavy tool of metal, not altogether unlike an adze, but its sharp end serrated. This tool is let fall vertically on to the surface of the stone, and by it all inequalities are removed. The marks which this tool leaves on the granite are much like those we see on certain unfinished statuettes in the Cairo Museum.

The blocks, some of them weighing 10 tons apiece, were moved by the Italian workmen with ease. Wooden rollers, crowbars and a few screwjacks were employed. The rollers, 6 or 8 inches diameter, were revolved by means of crowbars put into holes prepared near the ends of the rollers. The crowbars were in the same relation to the rollers as are the spokes to the axle of a wheel. The metal tool above referred to is made use of in nearly all European countries where hard stone has to be dealt with.

Mr. Clifton calls attention to the width of the holes cut by the ancients. There is a very well known way by which a wedge, by no means thick, is made to operate in a hole considerably wider than itself. This use of the wedge is known as "wedge and feather." Two plates of metal are inserted in the hole and the wedge is driven down between them: friction with the side of the prepared hole is thus avoided. Did the ancients make use of this device?

From what I have stated above, it is clear that great force is not required to split even a large boulder of granite. When we look at the section, given on the diagram Fig. 2 (not drawn to scale), it seems rather difficult to realize that anything so skin deep as the wedges can produce so great a result. The vertical measurement from "E" to "F," Fig. 2, was about 16 feet, in parts even more.

Somers Clarke.

[Extract of a letter from Mrs. Bertha Broadwood, August 8, 1911.—"You may like to know what I saw being done on the very smooth surface of some of the remarkable granite hills in S. India, December, 1883, not very far from Shravana Belagola in Mysore. The notched edges of the granite blocks and posts with which everything there is made, from temples and bridges to telegraph poles, puzzled me greatly, until I came upon a man making granite posts by the following process:—A line of small hollows is worked in a smooth surface of rock; a little straw is burnt over the hollows, a cupful of water is poured in, and the rock splits along the grooved line of hollows to the depth of several inches. To the best of my recollection, when two splits had been made at the desired distance apart, usually about 14 inches, the granite slab about 5 inches thick was just lifted from its bed by a crowbar; the granite of S. India tends to split horizontally." Mrs. Broadwood had supplied part of this account to Murray's Handbook of India, 1891.

The use of the "feathers," or slips of sheet metal, put on each side of the wedge, is to prevent the entry of the wedge crushing and grinding the edges of the stone grooves, which would waste the force used in merely enlarging the hole. The "feathers" spread the pressure without any rubbing of the stone, so that the expansion of the driven wedge all tells in straining the stone to splitting point. "Feathers" were used in Roman times, but there is no evidence of them earlier. The grooves and deeper holes cut in ancient granite work never show any trace of metal on the sides, nor any crushing due to pressure. The Indian system of heating and water chilling, agrees better than any other process to the remains of Egyptian working.—W. M. F. P.]

NEW PORTIONS OF THE ANNALS.

(See diagram at the end of this paper.)

FOR several years past, students have been tantalized by hearing of fresh pieces of the Egyptian Annals, like the Palermo stone, lying in the Cairo Museum unpublished. Though purchased in 1910, it is not till 1915 that anyone is allowed to study them. After waiting so long, it is disappointing to find that, in so expensive a form of publication, the reproductions are quite inadequate. Too small and indistinct, the plates will be useless whenever a proper edition is issued: and yet this is at a cost of three or four times the amount for which results are published elsewhere.

The main slab now published is about the size of that of Palermo, but is unhappily so much worn that only about a quarter of it can be satisfactorily read. At the first view it adds many important facts of that great document, which will be the foundation of Egyptian history, if ever it can be recovered.

First, the cartouche is used as early as the third king of the Ist dynasty. This is long before it has been found hitherto, the earliest being probably that of Nebka in the IIIrd dynasty. Yet this is not a contemporary document; it was engraved in the IVth dynasty, and so cartouches in the Ist dynasty may not mean more than the early cartouches in the Table of Abydos. It may have been thought proper in the IVth dynasty to put all kings' names into a cartouche.

Second, five predynastic kings of Upper Egypt appear at the top, while on the Palermo piece they are of Lower Egypt. This shows that a long catalogue of kings before Mena was preserved, at least forty names.

Third, there are two headings of kings' names, while the Palermo stone has only one early king, Neteren of the IInd dynasty. The first of these headings has a ka-name of three vertical strokes. This cannot agree with any early ka-name, except that of Zer. This was sometimes written, when in small spaces, with as few as three strokes, as on the sealings 106, 107 (R.T., II, xv). While naming this, it may be well to warn readers against various wrong readings that have been given for this name; the reading Zer is absolutely certain from such examples as the ivory box, R.T., II, v, 4, and the tomb stele of the king in Cairo, which shows the lashing of the uprights in high relief. With this ka-name is a cartouche clearly reading A which is certainly the third king of the dynasty, as on the Table of Abydos. Hence Aha must have been the second king, and Narmer=Mena the founder of the dynasty. Zet was the fourth king, and Den the fifth.

Another royal heading is unhappily almost worn away. In the ka-name Sir Gaston Maspero believes that he can trace the remains of Semerkhet, quite invisible in the plate. But the plate shows traces in the cartouche which cannot agree to anything but the standing figure of Shemsu=Semerkhet. Until a closer search of the stone may show anything different, it seems we should accept this identification.

The names of the mothers of the kings seem to have been uniformly given, as two are fully known and portions remain in two other instances. This agrees to the matriarchal nature of the early monarchy.

The Reverse of the slab bears the much more detailed entries of annals of the IVth and Vth dynasty, like those on the Palermo stone.

Such are the most obvious results from the largest of the fresh fragments. The three others are not of much value until pieces are found to which they may be joined. One gives part of the name of Khufu, perhaps in the annal of a later king; another is part of the record of a year of Neferefra, fifth king of the Vth dynasty; the third gives part of the annals of Sneferu. The Reverses of all these pieces are worn blank.

A fifth piece I purchased a few years ago, and the circumstances give a little light on the origin of the fragments. Of that at Palermo nothing is known about the source. Three, now at Cairo, were bought from a dealer, and are said to have come from Minieh. The fourth, at Cairo, is said to have been collected from a sebakh digger by one of the Museum guards at Memphis. Now, while I was at Memphis, the sixth piece was offered to me by a petty dealer. I at once bought it, and then handed it to a confidential native to show about quietly, and make enquiries. The story, as gradually obtained, was that it was found in Upper Egypt, had been brought down and sold to a Cairo dealer: from him it had been passed to a Memphite dealer, and so finally to myself. This shows how one piece at Memphis had come from elsewhere, and the Cairo—Memphite piece may have a similar history. The question of the source, or sources, of the pieces is of the utmost interest in view of future search.

Are all the pieces from the same monument, or were there two or more copies of the Annals? The internal evidence suggests that the Palermo and Cairo pieces are by different hands. On the Cairo piece the lines of the top row of kings are irregular and tilted; the main lines of the registers beneath are less regularly cut; the signs on both fragments I and 2 of Cairo, suggest that when fresh they were much less beautifully regular than those of Palermo. But on so large a monument, containing over ten thousand signs as first set up, it is very likely that more than one engraver would be employed, and hence differences of cutting do not prove there to have been more than one monument.

Another consideration is the thickness of the slabs. The large piece at Cairo is 2:36 to 2:44 inches thick; and this is stated to be the same as the two small pieces and that at Palermo. On the other hand the piece said to be from Memphis is 3:18 inches thick, and the piece at University College is 2:09 inches thick. These differences are not more than might occur in different parts of a row of slabs, which were at least ten feet long and probably two feet high. If they were loose tablets, then there would be no need for them to be all of the same thickness; if they were built up as a screen, the inequality of the thickness would not be noticed. They might be thicker to one end of the row, or thicker at the base. Before anything can be concluded we need an accurate gauging of all sides of the larger pieces, to see how much they taper in any direction.

When we come to try the agreement of the Palermo and Cairo slabs, the imperfection of the publications stands in the way. There are no dimensions of any well-defined points, only of the rough broken edges; the photographs have been so much trimmed at the edges that the opposite sides are hardly recognizable in outline; the two sides differ in scale in the Berlin plates of Palermo, and in the Cairo plates,—four scales for four views. What is needed is good measurement to

a tenth of a millimetre of the engraved main lines at opposite ends, to see if they are parallel.

For the present we can only assume that the lines on the Obverses of the two slabs were continuous, and are of the same distances apart. The variations of distance are not large enough to prove the monuments to be different.

A principle which has never yet been used is that of the unison of the five rows of year-spaces. In each of these rows (except the lowest two) the spaces are approximately alike in one row, but different in size to those of any other row. Hence, unless the spaces of different rows had exact proportions to each other, there could be no coincidence of the lines in all the rows one over the other, except at the ends of the monument. Each row is like a vernier scale to any other row, rarely coinciding in divisions, and with five rows the chance of all five coinciding is very rare. In practice, however, there is so much small variation in the widths of the spaces, that we cannot be certain how they would agree further than a foot or two from an ascertained point. Within a foot from any known part, we can pretty safely say whether the divisions fall into unison or no.

In the same way we can ascertain at what distance one slab may have been from another, if not far distant, by finding where all the rows of spaces would fall into the required positions, in unison with another slab.

To examine this it is needful to measure the vertical intervals of all the rows on the Cairo slab, and find what proportion it bears to the Palermo slab. It is not needful to know what the absolute size is, but we may adopt the plate of the Palermo Obverse as a standard: really about three-quarters of the full size. The Cairo photograph of Obverse has to be multiplied by 1.55 to agree with the Palermo photograph. The mean width of spaces in the rows then are, in inches—

		Palermo.	Cairo.			
\mathbf{A}	 • • •	510		·41 <i>7</i>		
В	 •••	·677 (to ·705)		·695 (to ·676)		
C	 	·550 (to ·568)		·573 (to ·562)		
D	 	·463		'458 (to '463)		
E	 	·580 (to ·620)		.599 (to .298)		

These differences between the two slabs are not enough to warrant their being from different monuments; in most cases the extreme variation on one slab (given in ellipses) touches the mean on the other. The differences between them make it only practicable to adjust the slabs graphically. The Palermo piece was therefore drawn, and the divisions continued onward to the left on the same scale; the Cairo piece was done similarly, on tracing paper, but with the continuation to the right, as it was clear from the back that the Obverse of Cairo was a short way to the left of that of Palermo. Then by sliding the tracing paper scales over the others the only likely fit was found which would bring all four scales, B to E, into agreement, within their variations. From this results the arrangement of the slabs shown in the two diagrams. As it is very probable that Userkaf and Sahura both began at the edge, we are warranted in accepting the unison of the four scales at the left of the Obverse, as the end of the monument. Thus we know to a single year how the two large slabs stand, and we have what amounts to 55 years on the scale D in fixed order; and by the remaining entries we can extend our knowledge of some lines ten or twenty years farther.

Were the equality of the divisions more accurate, we might discover the opposite end of the monument, by the unison of the scales; but the irregularities prevent accurate conclusions at such a distance.

The indications which we may glean about the positions of the other end of the monument are contradictory. On the Reverse there is at the base the entry of the 7th biennial cattle census of Sahura (marked here 7c). The second census, in the line above, apparently by the spacing, must have been in the 4th year; hence the 7th census would be the 14th year; and, as nine months of it are marked, the reign was 13 years 9 months, agreeing to 13 years in Manetho. Apparently, therefore, there were 10 years in the whole length of the monument; and, as the years remaining average 61 inches, the whole would be 61 inches long.

Having thus found Manetho to be right about Sahura, we might use the 28 years which he gives to Userkaf. But this would give a length of 134 inches; or, if we keep to 61 inches, and Userkaf's year spaces were as short as the shortest indicated, then 18 years must be accepted instead of 28. There is but one year of Shepseskaf, but that would imply a length of 141 inches, if they were uniform, and his reign were 22 years. Thus it is evident that we have not sufficient data for any certain conclusion.

The case is quite as insoluble on the Obverse. If we were to accept Manetho's lengths of reigns, the lengths of the monument would be indicated as between 65 and 113 inches. Of course all these lengths are on the scale of the plate of the Palermo Obverse, to be lengthened by a third more for the actual stonework. The monument itself must have been at least 7 feet long, or perhaps as much as 12 feet.

The historical points which can be identified in the first two dynasties are much increased by the new material. The reign of Zer is fixed (see Obverse diagram); and it cannot have ended between the slabs, as there is no other name on the Palermo slab. Hence the division on row B of Palermo is that between the reigns of Aha and Zer. That Narmer came in the same row is proved by the predynastic kings extending up close to the end of the first row, A. There is no proof that the line of parentage of the king, above his year spaces, was put in the middle of his reign; it may not have been quite in the middle, but we may presume it likely to have been centred. If so the reign of Zer was 46 years.

In row C, the reign of which the end of the mother's name is on the Palermo slab, probably extended to the division on the Cairo slab; but there might have been a short reign in the gap. If not so, then the reign of Azab = Merpaba was about 56 years; or, if we extend the royal parentage heading like that of Zer, then 57 years. That this belongs to Azab is shown by the next being of Semerkhet, with 9 years of reign. It has been proposed by Prof. Newberry that this long reign of 56 years was of Den by the resemblance of events to those on his tablets. But this position seems difficult in that view, for there would be only a few years of Zer, the reign of Zet, and half of Den to equal the whole of Narmer and Aha who have left such ample remains. By the position alone, these two reigns that we have of row C, should be Azab and Semerkhet. In row D is the name of Neteren; and this if centred must have extended almost to the Cairo slab. As that bears no name, evidently the reign of Neteren extended to a line which can be faintly traced as a terminus. This gives 46 years for the reign. That which follows it is the beginning of the reign of Perabsen.

In row E the Palermo slab states the birth of Khosekhemui, presumably in his father's reign. If so, his father reigned 16 or 17 years. As there is no title on the Cairo slab in this row, the division must be the end of the reign of Khosekhemui, and he reigned 27 years, and lived 30. This agrees practically with the Turin papyrus which gives 28 years' reign,

The summary then of the early dynasties, as shown by the fragments of the Annals, stands as follows. (The kings' names are kept in the forms most familiar, without any prejudice against more elaborate readings.)

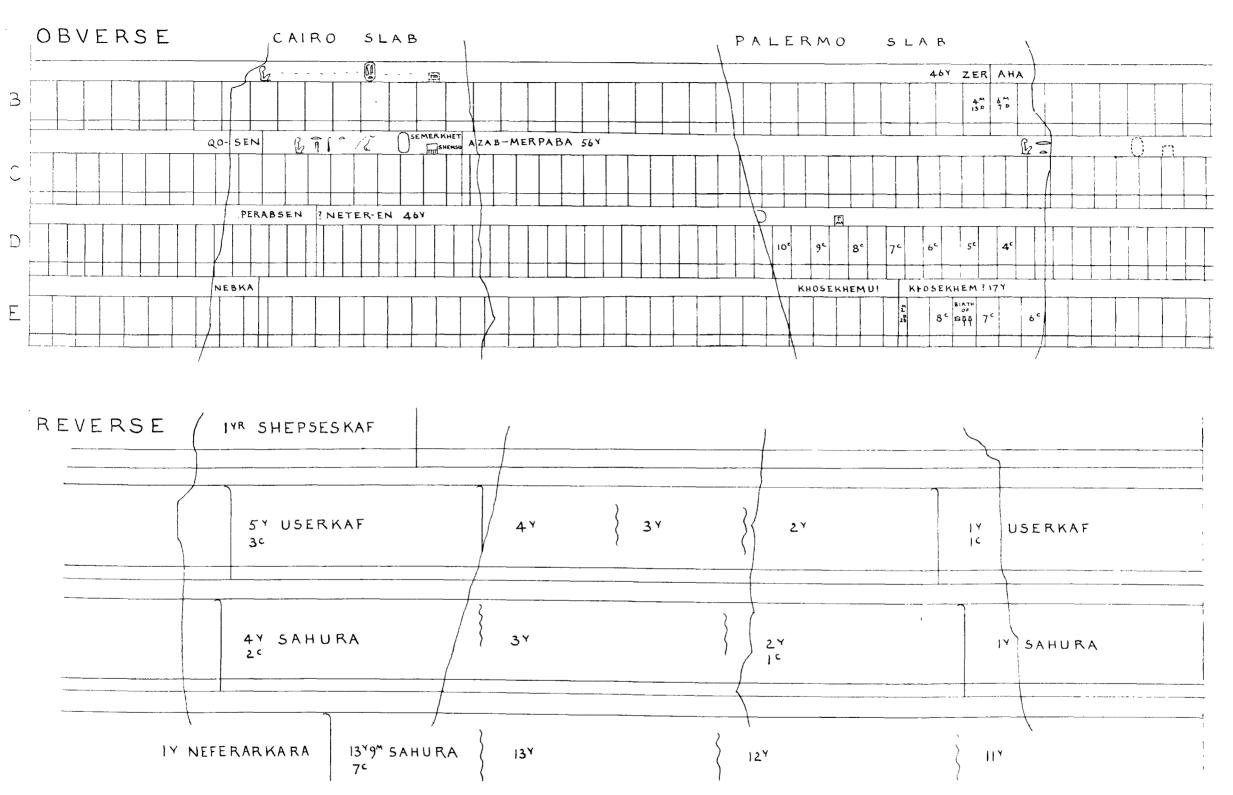
Between 150 to 200 prehistoric names, at least 40 of which were kings of Upper or Lower Egypt, stand at the head of the record. After which comes—

Annals.		Yrs.	Lists.		Yrs.
			Narmer = Mena		62
			Aha=Teta		5 <i>7</i>
Athet = Zer		46	Atthe=Zer		31
			Zet=Ata		23
			Den=Semti		20
		56	Azab = Merpaba		26
=Shemsu		9	Semerkhet = Shemsu		18
			Qa = Sen		26
			Hetepahaui = Bezau		38
	•••	46	Raneb = Kakau		39
Neteren =			Neteren = Baneteren		47
			Perabsen = Uaznes		17
			Send=Senda		4 I
			Ka-ra = Kaneter		17
			Neferkara	• • •	25
		17	Sekerneferka		48
Khosekhemui	• • •	27	Khosekhemui		28

Here the differences between the lengths of reigns in Manetho and in the lists is marked; yet there is an exact agreement in the average of 33 years in both sources. This seems to show that there is no biassed error in Manetho. There is one possible explanation, that there were two modes of reckoning a reign, from death to death of kings, or from co-regency to co-regency. The average would be the same in each case. The Annals certainly show the death point, as there is an interval of 82, 90 or 105 days between the joining reigns—evidently an interregnum of mourning.

It may be worth while to see what would result if we accept the Manetho numbers as those of the virile reign, before the king's old age required—according to African custom—that a virile successor should be appointed. Thus there would be two quite different reckonings, which would only be linked by the impossibility of the virile reign beginning later than the death of the predecessor, or ending later than the death of the king in question. Placing the facts together, and dating from the beginning of the dynasty, the results work out as follows:—

Annals, Death to death reign, Extreme limits possible.		Dynastic years.		Manetho, Virile reign.	
1		0		Narmer	62
		62		Aha	119
119–126, Zer 46 yrs		 119		Zer	150
to 165-172		 150		Zet	173
165–172, Den 56 yrs.		 173		Den	193
to 221–228		 193		Azab	219
221–228 Semerkhet 9 yrs.		 219	• • •	Semerkhet	237
to 228–237	• • •	 237		Qa	263



ORIGINAL RELATION OF THE TWO LARGEST PIECES OF THE ANNALS OF EGYPT. OBVERSE AND REVERSE. SCALE ABOUT 5:16.

		1			
		•			
		t			
				•	

Thus it would appear that Zer lived on through most of the reign of Zet; and that Den outlived Azab, and died in the reign of Semerkhet, so that Azab does not appear at all in the Annals. There is only an uncertain connection of 7 years (119 to 126), which length of time must cover the whole co-regencies of Aha—Zer, and of Semerkhet—Qa. The latter co-regency was probably short, owing to the short reign of Semerkhet, so most of the 7 years probably belongs to the period of Aha—Zer. In the reigns of Neteren and Khosekhemui the Annals and the MSS. agree to a year, so that no serious co-regencies are likely.

There are also some other possibilities to consider. In the 9th year of Zer, or year 128–137, there is an entry of the first festival of Zet, or Uazet, as this entry and also the king's name should probably be read. And about the 33rd year of Den, or year 198–207, is a second festival of Uazet. What if these were the years of the birth and death of King Zet, he being born at, and named from, a festival of the



PART OF THE ANNALS OF THE SECOND DYNASTY. UNIVERSITY COLLEGE, LONDON.

goddess, and a festival to the goddess being held at his death? This would give a life history of Zet as being co-regent at twenty-two, or less, and dying at seventy years of age. This is consistent, and makes us look at another entry, as yet untranslated. In the 38th year of Den, or year 203-210, there is a figure of Shemsu. What if this is the year of the birth of Semerkhet=Shemsu? It would make him sixteen years old, or less, at his co-regency, and thirty-four, or less, at his death.

These results of adopting the Annals as of vital reigns, and the MSS. as of virile reigns, seem reasonable enough to be kept in view. The most satisfactory

result is that thus the long reign of 56 years belongs to Den, and so keeps the connections which Prof. Newberry has shown between the events on the Annals and on the tomb tablets of Den.

Such seems to be all that can yet be extracted on the historical position. The complete solution must depend on some more large pieces of the Annals being found. The problem of the number of copies has to be settled, and the amount of resemblance between them. Whether this was a monument for the palace, for the Nilometer, or for the temple has to be considered. Until the Department of Antiquities will renew the same conditions as before for the very costly and difficult clearances deep under water level, there seems little hope of a regular search for the rest of the most important monument of all past ages.

The piece of the Annals here published, which I bought in Egypt, is from the Khosekhemui register, and shows the top of a year-sign of the Sneferu register. The horizontal lines are 217 and 100 mm. apart; the vertical are 185 and 200 mm. apart. The thickness is 53 mm. On the back is a small area of the Vth dynasty Annals, well engraved with clean-cut, though shallow, lines. Only the numerals 24 and 31 + n are left, beside the α bird and twisted rope n. The photograph is of the actual size. The stone is a hard jet-black quartzose rock, like that at Palermo. It is now at University College, London.

W. M. FLINDERS PETRIE.

THE TEMPLE OF RAMESES II AT ABYDOS.

IT is the misfortune of Egyptology that great monuments are seldom published in their entirety. We have to be content with little bits here and there, and can only be thankful that even that small amount is made available for study.

The temple of Rameses II, at Abydos, has been eclipsed by the much finer one of Sety I, and the only publication is the inadequate one by Mariette (Abydos, II). Therefore, on the principle that half a loaf is better than no bread, I publish here the notes and photographs which Mr. Hugh Stannus, F.R.I.B.A., made at Abydos during the winter of 1902-3. He had intended to publish a complete architectural study of the temple, but he died before he had even begun to cast the work into shape. He left the notebook, in which he had entered the detailed measurements, and sketch plans, and with these were some photographs of bas-reliefs and principal architectural features of the temple.

It is impossible to make out from the notes of another person what that person himself could have made; so this work of Mr. Stannus must not be judged by the meagre results which I have obtained.

In the letterpress on each plate the words in inverted commas are Mr. Stannus's notes which accompany the sketch plans in his notebook. The lettering of the chambers here is continued as that of Mariette, in order to avoid confusion. Besides the notes given on the plates, I add here some further details on the various halls and chambers, referring to the plan at the end of this paper:—

"In all rooms, etc., and generally, the stones are in alternate courses, so that no joint comes in a corner. A result is that corners are not square, but slightly inclined and rounded."

Osirid court A. "The Osirids are of sandstone: three courses (above plinth) remain. The joints are as shown below. Sizes and heights are very irregular." [Put 2 sketches here.] "The facing-row has the second course to be a throughcourse, in the other rows the third course is a through-course." [4 sketches here.] "The skreens between piers are limestone." "All the piers were whitened and storiated." "Storiation carried on both pieces across the joints on to faces of piers; but there are no figures or other things carried across the joints." "The facing row of Osirids is 2 feet 10 inches above the others. They were altered, at '00' plinth cut away, to be flush with skreens."

Chamber D. "Portal of sanctuary. Pieces of red granite. The jambs were sandstone." S.W. wall: "Dado interrupted by alabaster 'doors,' down to pavement." Mariette says the ceiling was of red granite, inscribed; parois en albâtre sur une plinthe en beau grès statuaire à grain très-fin.

Chamber E. "Walls show barque on each side." Mariette notes a bench in this room, and says the boat had the head of Isis.

Chamber F. "Tehuti leads king to Osiris—on end wall." Mariette notes a bench.

Chamber G. "Right hand, barque." At end, "King as Osiris. Two gods pouring $\frac{1}{2}$ and $\frac{1}{2}$ over king's head." Mariette has reversed the inscriptions in his plates. Thus the inscriptions on Plates 14 and 15 of his *Abydos*, II, should read from left to right. The head of the kneeling figure of the king, and the three vertical lines of inscription behind him, are just visible on the end wall in the photograph. S.W. end, "No shelf here: reliefs instead." N.W. side, "Barque of R. II."

Chamber H. S.W. end, "No shelf here: marks of fire."

Chamber I. Lintel of doorway, sandstone. Mariette notes a bench.

Chambers J, K. Mariette notes a bench in each.

Chamber L. "End wall, Isis presents king to Osiris." Mariette notes only a bench.

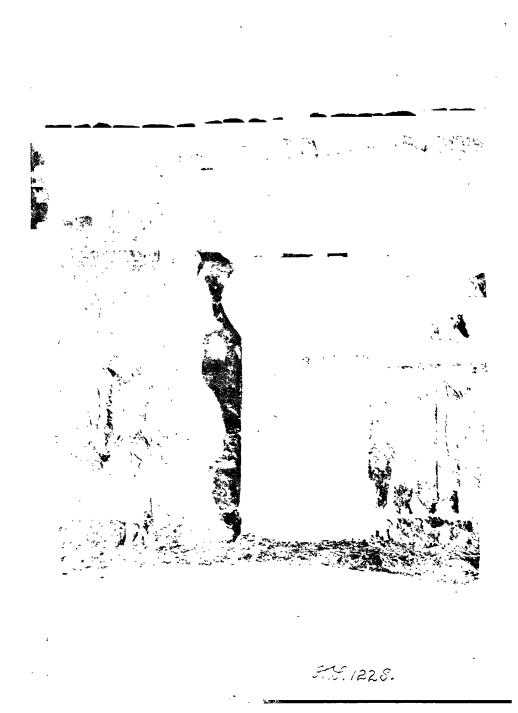
Chamber M. "Shelf projects 9 inches beyond blocking which supports it." Mariette gives (p. 23) the names of the guardians of the doors of the nine niches on the N. side.

Chamber N. S.W. end. "No sign of shelf." It was in this chamber that the list of kings was found, see Mariette, Plate 18. Mariette also remarks that the door on the N.W. into first hypostyle, B, was cut after the decoration was finished, and was placed with the utmost care so as not to damage or interfere with the sculpture.

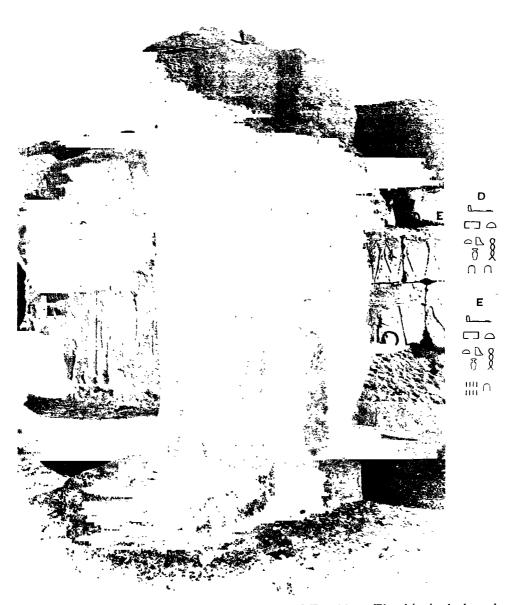
Chamber O. "Piece of sandstone ceiling." Mariette notes on the S.E. side a large votive boat set on a quadrangular stand, the boat bearing the cartouches of Sety I (Mariette, Abydos, II, p. 24).

Chambers P, O, R. "Jambs slightly splayed about 04 inch on each side.

Chamber S. "Walls, hard limestone. Piers, sandstone painted white. Insides, *i.e.*, reveals and backs of the nine cupboards, carved and painted in Sety style of relief."



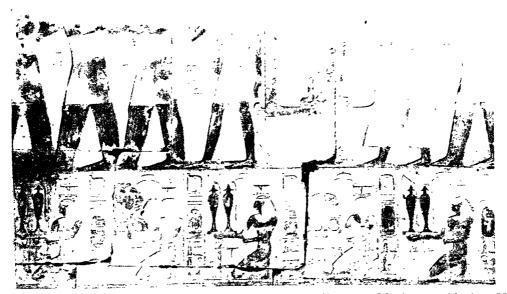
I. Osirid court, A. Blocked doorway on S.E. side, taken from within the court between the second and third Osirid figures. On left upper register, bearers of offerings with backs to door; middle register, bearers of offerings facing towards door, carrying various offerings for the . Lowest register shows beginning of royal titles in large hieroglyphs; the inscription appears to end with the seated figure on the same level on the right of the door.



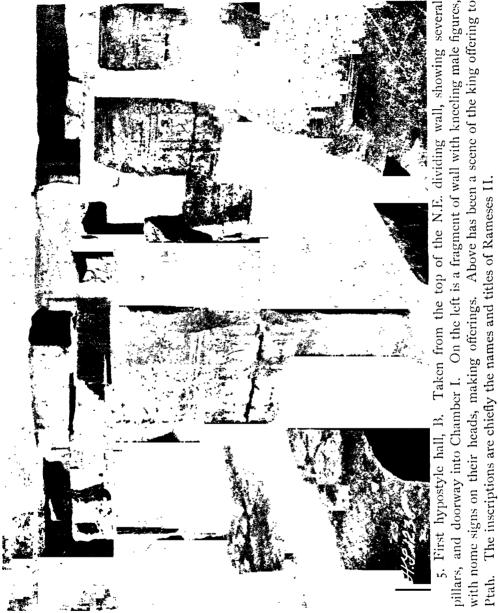
2. Osirid court, A. Third Osirid figure on S.E. side. The blocked door is partly visible on left. Names and titles of king are given in vertical inscriptions down front of figure and on pier. On wall at back are figures carrying beer, according to the inscription copied at the side.



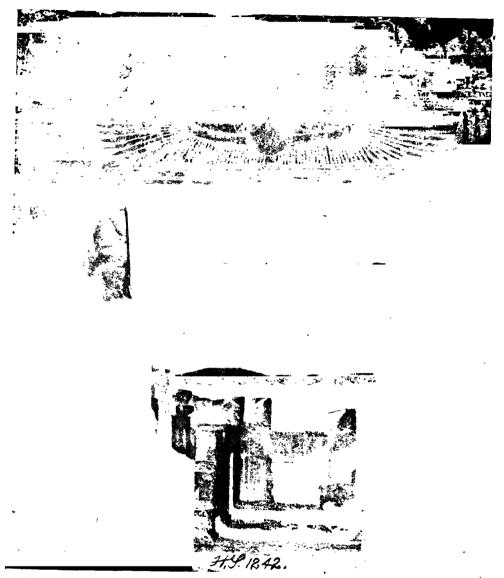
3. Osirid court, A. N.W. wall, see Mariette's, Abydos, II, 7a-c. This procession of the prize cattle, has the normal ox in front, and the ox with deformed, or "crumpled," horn behind. This artificial twisting of the horn is still done in Africa. In the middle is the oryx led by "The herdsman of the oryx of tethered cattle of the eternal house (tomb) called Ramessu mery Amen Khnemt kher Abdu." Mariette's copy has divided the upper line of inscription wrongly, as also in other cases.



4. First hypostyle hall, B. North-west wall, see Mariette, Abydos, II, Plate 12, Nos. 15-19 inclusive. The lion-footed shrine ?) is carried by priests walking four abreast. The nome figures below are of Aa-mater, Zerti (IVth), Ani, Uast, Maad, of Upper Egypt, alternately male with food offerings, and female with drink offerings.



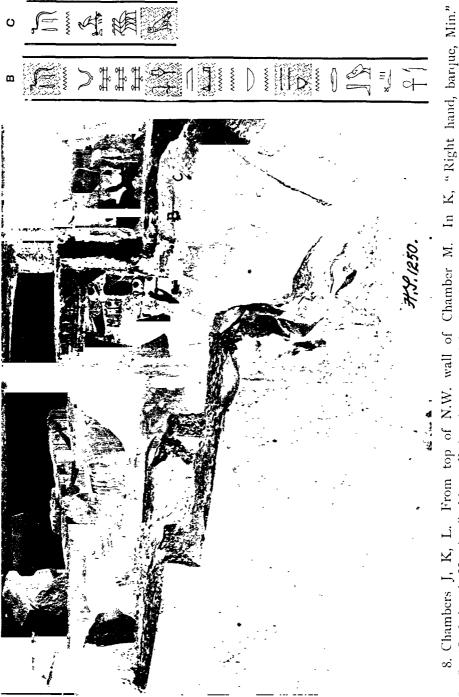
pillars, and doorway into Chamber I. On the left is a fragment of wall with kneeling male figures, with nome signs on their heads, making offerings. Above has been a scene of the king offering to



6. Chamber J. Doorway taken from N.W., looking across second hypostyle hall, C, to Chamber P. Bases of pillars are seen on the right, the dividing wall of the two halls on the left. The ornament above the winged disk consists of "two cartouches on *nubs*, three *khekers*, four repeats + two cartouches."



[. Lintel of doorway of I is sandstone. The cross wall has been removed at the top, and through the gap thus formed is seen the stairway on the south side of 7. Chambers J and I. Taken from top of wall on N.W., looking across first hypostyle hall, B, Two pillars of second hypostyle hall, C, to stairs. Doorway of Chamber J on right, of I on left. are visible through doorway of] the temple.



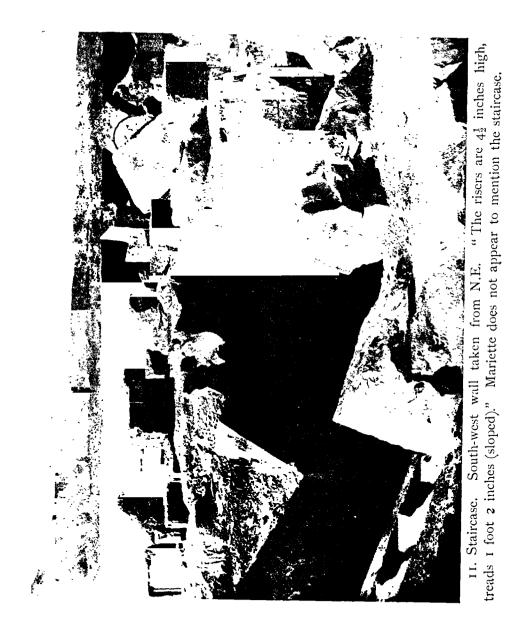
8. Chambers J, K, L. From top of N.W. wall of Chamber M. In K, "Right hand, barque, Min." In L, "Left hand, Nu (god), king offering incense; right hand, Ra, king offering."



9. Room H. North-west wall. Mariette says (p. 22) "Un seul fragment d'une des scènes qui décoraient l'intérieur de la chambre est encore visible; on y voit Ramsès à genoux s'abreuvant aux mamelles de la vache divine." He has omitted the inscriptions,



I 2

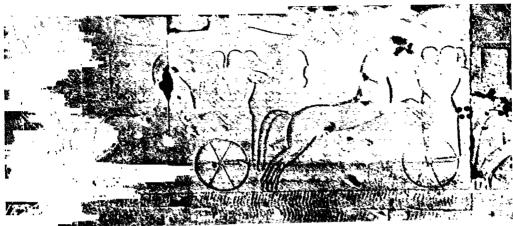




I 3



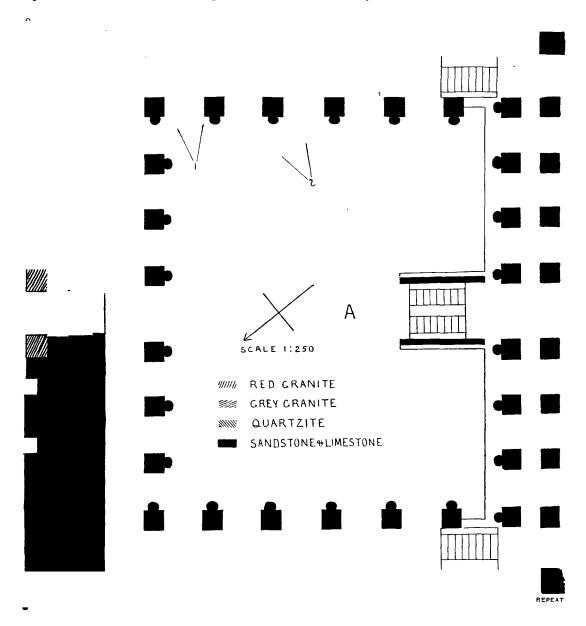
and in front of the royal chariot is a column: "The enemy of the Hittites, with the drowned chief being held upside down, line below are chariots of Hittites and Amorites with shields, as in the next view; note the unusual figure of the last charioteer, pulling up his horse.



14. Outside wall, S.W. end of N.W. side. Battle of Kedesh. Note the Amorites with square shields and the Hittites with shields contracted in the middle, like a Mykenaean or Boeotian buckler.



15. Outside wall, S.W. end of N.W. side. Hittite and Amorite chariots fleeing up hill, probably to a fortress.

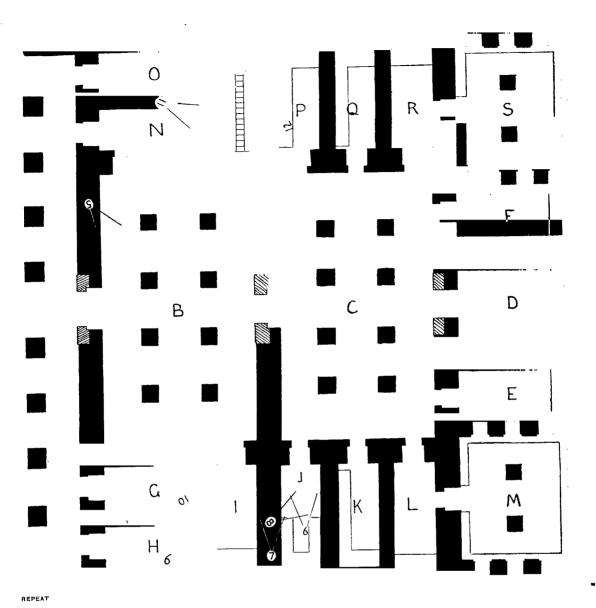


Plan.—Drawn by Captain G. U. Yule, R.E., from Mr. Stannus's measurements and sketch plans.

A few notes are needed in explanation of the plan.

The lettering is that of Mariette, continued. The temple lies square with the river line, the entrance being towards the river as usual. On this plan the point of view of each photograph is numbered, corresponding with the number of the view here. The range of each view is marked by two radii drawn from the point of view. The jambs of the great gateways are all massive piers of hard stone, varying in nature as here shaded. The purpose of these was to prevent the overthrow of the doors in a siege. The recesses in the sides of the entrance gateway are of the breadth of each half of the gate.

In the great Osirid court, A, the pillars are on the ground level on three sides, but are raised on a platform along the back. Two side stairways, and one in the



middle, give access to the higher level of the temple. The middle stairs have smooth slopes at the sides (like the other stairs), and also in the middle, evidently to assist in sliding up heavy shrines or furniture of the temple. The plan is here divided in two, for printing on the page; the row of pillars is repeated on both halves of the plan, to fix the connection.

In the rooms opening off the second hypostyle hall, C, there are stone benches, for placing the temple furniture upon. In the two corner halls, M and S, are benches on all sides, and recesses which had doors, for holding the smaller objects. These rooms only open out of another room; thus two doors would have to be forced in order to attack them. It will be noticed that the widening of the entrance of each chamber to hold the door, is always wider on the right hand; this shows that the door opened on the left, *i.e.*, was to be pushed open by the right hand. In Chamber N, the doorway into the hall B, by the direction of it, was intended to

guard B from N, that is to say, the chamber N was to be left in use, while B and all the interior of the temple was kept closed. From the direction of the opening of the doors at the sides of the great court, A, it seems that they were not intended for exit, but to open into storerooms which had to be guarded from attack in the court.

The whole of the work is irregular, the pillars and spaces and sides of halls all varying an inch or two without any regard for more accuracy than appeared to the eye.

M. A. MURRAY.

REVIEWS.

Le Tissage aux Cartons, et son utilisation décorative dans l'Égypte Ancienne. Par A. van GENNEP et G. JEQUIER. 130 pp., 12 plates. 4to. 120 frs. 1916. (Neuchatel: Delachaux et Niestlé).

This volume is perhaps the finest work ever issued on any ancient technique, both in its completeness of material and practical study, and in the beauty of its illustrations. The only misfortune is that such a book must be costly. It combines the ethnological work and technical skill of M. van Gennep, with the full knowledge of Prof. Jéquier, which our readers will remember by his work on Egyptian civilisation (Ancient Egypt, 1914, p. 86). The illustrations alone are a joy to see: forty-eight colour photographs of various patterns of belts, five actual specimens of the woven patterns, and nearly two hundred black and white illustrations, serve to exhibit and explain every part of the subject. What the subject is will puzzle most readers, until they read about it, for it is an art which has totally disappeared in modern civilisation, and only lingers in countries where art is not machine made, and where humble workers can yet give scope to their own skill and designs.

This kind of weaving has been traced in Egypt from the beginning of the dynasties down to our own generation, but is almost extinct, having become reduced in Cairo to coarse work of one old man, without any apprentice. It was practised in ancient Libya, Aegea, Syria, Persia, Elam, and East Prussia; and it is still a living art in Japan, China, Birmah, India, Himalaya, Sikkim, Tibet, Tashkend, Minsk, Persia, Baghdad, Armenia, Caucasus, Damascus, Jerusalem, Tunis, Algeria, Asia Minor, Bulgaria, Bosnia, Poland, and Iceland. In any country where narrow, thick bands, or ribbons, of complex patterns are found, there is a presumption that this peculiar weaving is practised, and the work should be examined as to its methods. The woven bands of inscriptions, whether from Birmah, Persia, Poland, or Iceland, are all made on this system.

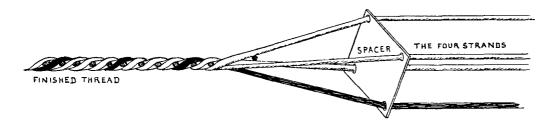
This mode of weaving, which has been curiously lost to sight in western lands, has been called after the little spacers used to keep the threads apart,—tissage aux cartons from the spacers of card, or Brettchen weberei from the spacers of wood. In English the most intelligible term seems to be from the principle of the work,—twisted weaving; though, to avoid confusion, "carton-weaving" would be technically preferred. The essential principle of it is to have a many-coloured twist of thread, and to turn upward whichever colour is required. To take the simplest case, suppose an upright loom with each of the vertical warp threads made of two strands, red and white—If the shuttle is passed, not over and under the warp, but between the red and white strands of each thread, splitting the twist,—then, whether the red or the white appears on the face of the stuff, depends on which is next to the weaver. It is possible to have the whole surface, or any part of it, red or white. The colour entirely depends on which strand of the thread is outwards.

In order to part the strands of the thread so as to pass the shuttle or needle of the west, a small spacer is needed to keep an open channel. If there were only two strands a bar would suffice; when there are three, four, or even six strands in one

thread, then a plate pierced with holes for each strand is required. As the plate is turned round, any one of the strands can be brought outward for the warp thread to pass behind it. Thus there must be as many spacers as there are threads, each with as many holes as there are different strands in a thread.

From the actual specimens provided in the book, it will be seen that for ordinary stout material about twenty-five threads are used—and as many spacers—to produce one inch width of stuff. The greatest number of threads worked at once is about three hundred, and M. van Gennap has worked with a hundred to a hundred and fifty at once. Thus bands of four inches wide are readily made, and as much as eight or ten inches width is possible.

In looking at a piece woven uniformly with a systematic shifting of the spaces, tracing along one thread the number of crossing wefts before the direction of twist is reversed, or the same order of colours recurs, shows the number of strands in the thread, or of holes in its spacer. In complex patterns such as inscriptions, the movement of twist of the thread must be irregular. Suppose, for instance, that a red inscription on a white ground was wanted, then by having four threads on the spacer, red and white alternate, the white can be kept always up in the stuff by a half rotation each time until the red is wanted, when a quarter turn will bring



a red thread up. The diagram of a section of stuff shows a single thread of four strands, pierced by the weft threads, and with the strands separated by the spacer, ready to pass the weft-needle or shuttle. Perhaps the very common pointed rib-bones, usually called netting bones, were for this work, the thread being wound upon them.

Having noticed the diffusion and the principles of this kind of work, we may summarize the Egyptian forms of it which are described by Prof. Jéquier. First, the various patterns of zigzags and lozenges of the belts on royal statues are collected, and all shown to conform to the style of the patterns of twisted weaving. The V-patterns down the kilts are of the same styles. Pouches for carrying daggers are also similar.

The patterns of the stripes on the early façades and false doors are collected, and prove to be of the same fabric. Here a long section (14 pages) is devoted to the panelled building work; and the wooden origin of it all is repudiated (p. 36) on the ground of the simpler houses of the peasants being of mud brick. Unfortunately, the author has not noticed that the actual timbers of such wooden houses have been found in the first dynasty (Tarkhan I, Plate IX, published three years before). The wooden house had narrow openings which could be closed at night; during the day they were open for air, but shaded by strips of this twist-weaving, lashed down at the bottom to prevent their blowing out of place. There would have been no purpose in hanging weavings over a brick building; but as the structure was of vertical wooden planks, with narrow openings, such strips of coloured weaving were exactly required to shade the spaces.

The various types of geometrical pattern are classified, and lettered M to U, with the sub-varieties numbered. One of the most successful restorations is that of the curious chain pattern seen on the painted façades; this is closely reproduced in the twisted weaving on Plate IX, I, 2, which seems thus to solve the origin of this puzzling decoration. The patterns engraved on the ivory and woodwork of the Ist dynasty, are also exactly reproduced by woven designs, and we must accept them as evidence for the use of such fabrics, although the originals have entirely disappeared.

The variegated dresses of the Syrians and Aegeans are of stripes of twisted weaving patterns. It seems probable that the strips of about a couple of inches width were made separately, and then stitched together to form a wider stuff for dress.

There is, then, here an excellent and full account of a perishing art, which has had a large place in ancient work, and which should be recognized at sight by all archaeologists. We should be grateful that it has been so thoroughly studied and explained.

The Influence of Ancient Egyptian Civilisation in the East and in America. By G. Elliot Smith. 32 pp., 4 plates, 8vo. 1916. (Manchester University Press.)

This amplification of a lecture is not a favourable means of judging of new theories. In such a form, declaration has to do duty for demonstration, and it is impossible to present a scientific argument for a fiftieth of the propositions that are put forward in such a space. It is the more needful, therefore, to learn in what sense various forms of assertion are used, in order to know the weight that they should have in the reader's mind. We must begin by thus separating the mode of presentment from the further question of the results of the facts stated.

"There can be no doubt that it was the Phoenicians, lured forth into the unknown oceans in search of gold, who first broke through the bounds of the Ancient East, and whose ships embarked upon these earliest maritime adventures on the grand scale" (p. 8). We happen to know that gold was abundant, without any voyage, in Asia Minor and in Persia, in the time of the Phoenicians, apparently more than was obtained from any other source. The greatest enterprise of Phoenicia, founding Carthage, was not due to the lure of gold, for it was some centuries before it was enriched by Spain. As to the Phoenicians first breaking through the bounds of the East we have no evidence. Egypt continually traded down the Red Sea, and that there was traffic on to the Persian Gulf is most probable. Hence, when we read that "there can be no doubt" about these assertions, it must be regarded only as a personal belief.

Then we read of the Phoenicians that "only one pearl field in the whole world (the West Australian site at Broome) escaped their exploitation." This vast claim not only has no proofs, but seems physically incapable of proof. Such statements therefore must be accepted as showing the author's mental attitude in science, but not further. Of another recent theory of very uncertain character, and contrary to most of the facts, we read that it is "abundantly clear," and that it is "no longer possible to doubt." Here, again, we only touch on the author's frame of mind.

It appears then that we must seek for the facts which are to prove the propositions, and frame our own judgment upon them. They are hard to find, because, though a multitude of things are mentioned, the degree of their similarity, and their dissimilarity from other things, is never expressed. One of the most

definite details is the statement that the mummification practised in the XXIst dynasty (but not any earlier stage) was carried eastward, and is found in Eastern Asia still practised. Now we must accept this as Dr. Elliot Smith's conclusion, for we have not any details before us at first hand. Yet what does it postulate? That a system has changed every tew centuries in Egypt, so that it is precisely that of the XXIst dynasty that is specified; and yet, as soon as it left Egypt, it was maintained in the same stage for nearly 3,000 years although with different conditions, climate, and population. This would be about as difficult to credit as any theory ever proposed; to believe in independent invention is by far the more likely course.

Failing to find a single clear demonstration of connection, excluding any other explanation, let us turn to one of the most readily defined matters, the forms of tools, of which we have a fair amount of accurate evidence. The theory that the use of metal tools originated in Egypt, has been warmly taken up from Dr. Reisner by Dr. Elliot Smith. If Egypt was the source of the tools, naturally the forms should be the same in the borrowing countries. Now the facts are that all the most usual tools of early Egypt are unknown elsewhere, and the most usual tools of other lands are unknown in Egypt. There are eighteen varieties of tools peculiar to Egypt, the main ones being the flat square axe, the round axe, the axe with lugs, the round topped adze, the necked adze, the sharp-edge stick, the dagger with crescent handle, and the dagger with parallel ribbing. Not one of these are known in the lands around Egypt. On the other hand, the pillowy axe, the socket handle, the tang and flange handle, the pierced axe or hammer, and the girdle knife, all of the commonest forms of other lands, are quite unknown till Roman times in This implies that each land had its own vigorous and independent civilisation, which might be added to, but which was never supplanted; and the use of metals grew up on quite independent lines in Egypt and other lands. Here is something concrete, and capable of exact and exclusive proof.

When we find claimed as evidences of connection between civilisations, the use of stone seats, of conch shells, of pearls, of most of what is common to nearly all mankind, we seem to have gone back to the old antiquarian speculations of the eighteenth century; and common sense refuses to yield up the scientific methods of proof which later generations have clarified.

The Turquoise.—JOSEPH E. POGUE. 4to, 162 pp., 22 plates. National Academy of Sciences, Washington. Vol. XII, Part II, 3rd Memoir. 1915.

This is another of the thorough studies of sources and details by which Americans are building up a scientific literature of their own. The writer had full opportunities, being Assistant Curator of Minerals in the U.S.A. National Museum, and having studied the collections of America, London, Paris, and Berlin.

A full recital of the ancient references to turquoise is given, with translations of authors, ancient and mediaeval. The chemical and physical nature of the stone is completely stated. The occurrences of it in Sinai are described from all sources, with the general circumstances of its discovery and working, ancient and modern, occupying over six pages, with ample references. There follow accounts of all the other sources in the world, especially in America.

The use of turquoise is then considered at length. The Egyptian jewellery with this stone is described; a full account is given of how it is worked up in Persia, India, Tibet, China, and America, especially detailing the extensive use of it in Mexico.

The mythology and folklore of turquoise is then recounted, principally European and Mexican. Lastly, the technology, modern cutting, imitations, and amount mined in recent times is described from a business point. A full bibliography of eighteen pages ends the book. The plates illustrate specimens of turquoise (coloured), the mining sites, and jewellery from various countries. The weird turquoise mosaics or veneers on heads and other forms, are mostly illustrated here. The wide extent of treatment of the subject, and completeness of detail and reference, will probably make this the standard work for a century to come.

Annual Archaeological Reports, 1914, 1915. By ROWLAND B. ORR. 99 plates, 118 pp., 8vo. Toronto, Ontario.

These Reports show the wide general interest in North American civilisation fostered at the Ontario Museum; and though not directly touching Egypt, they give details which are of service for comparison. The figures on the carved tobacco pipes are of much the same level of work as the figures of prehistoric Egypt, giving one equation for realizing the culture of the early Egyptians. Another paper on the Cross in American sculpture raises the old question of independent invention. The great example of the Palenque Cross looks strongly as if it was influenced by the forms of the seventh century A.D. which are given on p. 108 in the present number. A paper on games gives details of the gaming pieces which are imitations of plum stones marked with different colours on the sides; a group of these is thrown into a dish and shaken, and the numbers of each colour counted. This is the basis of hundreds of varieties of games, as cards are the basis in Europe. Gambling on the results is carried to excess, leaving the loser without a stick or a rag of property. Perhaps the prehistoric Egyptian was as reckless over his games. An article on the native surgery enables us to realize what the medicine-man has been, whose many properties have been found in Egypt. The methods of flint working are discussed; bringing evidence that, for some kinds of flaking, heating and dropping cold water on the flint will remove flakes. An account of splitting a great boulder by lighting a fire upon it and then running water over it, accords closely with Mrs. Broadwood's account quoted in this number. As no particular direction of cleavage was required, no directing groove was cut in the American case, but heat and chilling split the mass "with a deep sullen boom." Such are some of the suggestive matters dealt with in these Reports.

THE PORTRAITS.

THE Alexandria Museum has recently obtained a fine bronze head of a Negro which is believed to have been found at the site of ancient Xois. Dr. Breccia, Director of the Museum, has published the head with two photographs in the Bulletin of the Archaeological Society of Alexandria, 1915. The bronze is in fair preservation, the surface a little corroded from the saltness of the soil. Its height is 62 inches, slightly larger than our illustration here. The features are strikingly similar to those of many of the Berberine boys employed to-day as servants in Cairo, and thus proves the long persistence of this type of physiognomy in North-East Africa.

Dr. Breccia does not think the head ever formed part of a statue; at all events the base of the neck is not finished off for being placed in such a position. It is a fine piece of realistic work, but whether dating from Greek or Roman times is uncertain. It has been placed in the Greco-Roman Gallery. It is not supposed to be of the old Egyptian era.

J. Offord.

The bust of a Negro which has been published in the Bulletin of the Archaeological Society of Alexandria (No. 15, Pl. II), has been sent to me for remarks. I know nothing of its history, but it seems obviously a piece of Italian work, and probably Roman, as Dr. Breccia does not regard it as Renaissance or modern. As a Roman version of a Negro type it is remarkable and interesting, showing the same generalised realisation of human types so characteristic of seventeenth-century art. So far as it bears any resemblance to existing Negro types, it recalls most to me the Negro of Bornu, a type of which I have seen a good deal in the north of Africa amongst the ex-slave population, as well as encountering them much farther south in Southern Nigeria. This type has a comparatively small and insignificant nose, very flat, but with rather thin and curved nostrils, marked prognathism, and full, everted lips. But it is also characterised by a great breadth across the cheekbones, and this seems to be lacking in the bust, which rather gives one the impression of having been modified by the artist from the appearance of his model, to render it more human and less outlandish. same Negro type, however, is also occasionally met with in the North-eastern Sudan -in Kordofan, and thence across to the western confines of Abyssinia. is rather long in growth for the average Bornu Negro, but looks as though in the model it may have been coated with clay, a practice very common at one time amongst the Negro peoples of Tropical Africa,—clay and mutton fat. As regards growth of head-hair, however, we are apt to get a misleading impression as to its natural shortness in the Negro variety of man. When allowed to grow unchecked, Negro head-hair may extend from six to twelve inches from its base—or even more in women. It is because the Negro, even in his most savage state, desires to keep his head-hair short, that we imagine he is naturally a short-haired man.





HEAD OF A NEGRO.

BRONZE.

ALEXANDRIA MUSEUM.



HEAD OF A NEGRO.

BRONZE.

ALEXANDRIA MUSEUM.



ANCIENT EGYPT.

SIR GASTON MASPERO.

1846-1916.

WE deplore the loss of one who has been, for a generation past, the most prominent figure in Egyptology. By his commanding position, his great stores of knowledge, his original powers of insight, and his ability to attract the public, he was the figurehead of Egyptology in France, and the authority most generally recognized in all other countries. His vast labours, all skilful and polished, united and gave animation to a wilderness of scattered facts; it was in the rendering of a picture of the past that he excelled, rather than in great discoveries or new prospects.

In such a life, one of the main points of interest to others must be its development and general scheme. Sir Gaston's working life is divided into five periods, alternately of literary and of administrative work. Originally of North Italian stock, he had the round head and short thick figure of the Alpine people. In thought and language he was not distinctively French; his writing is peculiar for its international style, so much so that it is difficult to avoid a word-for-word translation. Here is a chance sentence put into English, with only a single inversion:—" In the groups of huts of mud, scattered in the hollows of the ravines, sheltered the soldiers of police, the guardians and their families, the workmen who excavated the galleries of the tombs and those who decorated them, the lower clergy attached to the services of burials and of offices of commemoration, the dealers in offerings." Beyond the necessary positions of the adjective and the negative in French, there is scarcely anything which is distinctive of one language more than another in his style. This extreme simplicity and clarity was certainly one of the secrets of the popularity of his scholarly exposition of ideas.

The first Egyptian publication of Maspero, at the age of twenty-one, was in 1867,—a study of the dedicatory inscription of the temple of Abydos; in the next year followed a translation of a Hymn to the Nile. Then came a visit to South America, for some scientific work for a patron, whose ideas could not be furthered. After this the youthful Maspero received the first great step, in the editing and copying of Champollion's Notices. That work was begun in 1844, but had lingered unfinished for a quarter of a century. De Rougé entrusted the task to the rising scholar, and over a thousand pages stand transcribed in the clear, bold, unmistakable handwriting. Such a work was an education in itself, and, after that, he had a firm grasp of the general character of the monumental style. This work extended over six years, 1869 to 1875; and in that time—down to the age of twenty-nine—there came a long series of studies, two on the Gebel Barkal steles, on the forms of conjugation,

the judicial papyrus of the XXth dynasty, on the personal pronouns, on the chapter of the girdle-tie, an academic dissertation on Carchemish, on Egyptian letter-writing, and on papyri in the Louvre.

All this work was the foundation for the principal literary labour of his life. The *Histoire Ancienne des Peuples de l'Orient* appeared as a little octavo in 1875; other editions gradually swelled its bulk in 1878, 1884, and 1886. Then the quiet years of study in Paris led to an enormous expansion of the *Histoire* into the three great volumes published from 1894 to 1899.

To turn back; the second stage was the official appointment in Egypt, to the French Mission in 1880, and to succeed Mariette as head of the Department of Antiquities in 1881. The old Bulaq Museum was a desperately crowded storehouse, or collection of storehouses, with an overflow department all over the garden, where sun and watering played havoc with antiquities. Such was all the domain of Maspero in his first administration, 1881 to 1886. He made some classification, so far as possible in such close quarters, and produced a charming little guide book in 1883 to instruct the general visitor and help the student. His routine was to go up the Nile on a dahabiyeh for a tour of inspection during the cool months, visiting excavations, and settling what repairs were needed for the conservation of the monuments. The boat generally returned loaded with the minor antiquities which the Department had acquired during the year. The administration occupied practically all of Maspero's time, so that only small papers were produced by him during those years. By 1886 he determined on returning to France, owing to Madame Maspero's health and other reasons.

The third division of his life, from 1886 to 1899, was in Paris, occupied with literary work and study. First came, in 1887, a handbook of Egyptian archaeology. No such work existed then, and it has not been supplanted since as a handbook, though the progress of exact knowledge and dating has left it now far behind. A study of the historical results of the great discovery of royal mummies at Deir el-Bahri, followed in 1889, which was the first detailed account of the treasures which had been found eight years before. A voluminous catalogue of the Marseilles Museum represented also a considerable amount of work. A charming little school book on ancient life in Egypt and Assyria appeared in 1890, as *Lectures Historiques*. It makes an admirable first reader in French for English schools, owing to the simplicity of the style.

Perhaps the most important piece of research in Maspero's whole career was his editing and translating of the Pyramid Texts. Discovered in 1881, these all-important texts of the early religion differed so much from the later style that they needed wide insight and imagination to grasp their meaning, and several years passed before they appeared in sections in the *Recueil*. These translations were finally edited in one volume in 1894, when also began to appear the great final edition of the *Histoire Ancienne*, the completion of which occupied five years more. Meanwhile affairs in Egypt had undergone many changes. At the Museum, Grébaut and Loret had come and gone, and the brilliant administration of De Morgan had produced the Dahshur jewellery and other surprises. But De Morgan's talents in field work were wanted for the French Mission in Persia, and there was no French subject who could worthily take up the Museum except Maspero.

His fourth stage was the administration in Cairo from 1899 to 1914, at the ages of fifty-three to sixty-eight. Again his literary work almost ceased, as administration occupied his attention. Under the management of Grébaut, there

had taken place the very ill-advised removal of the Museum to the old palace of Gizeh, where it was in great danger from fire, and at an awkward distance from Cairo. Such a position was impossible permanently, and a new Museum was to be built within half-a-mile of where the old Bulaq Museum had stood. This was opened in 1902, and for the last fourteen years has been an unending cause of expense, trouble, and worry to the administration. Badly designed, and worse executed, it may be said to have been a serious drain on the efficiency and result of Maspero's second official life. He had the great task of bringing back from Gizeh the collections, now largely increased with big monuments. Then followed the difficulties of arrangement in bad lighting, and perpetual removal of parts of the collection to allow of alterations, not even concluded at the present day.

The main official work undertaken in the country was the clearance of Karnak, the repair and reconstruction of the monuments of which were entrusted to M. Legrain, and are still proceeding. The annual visitation of sites was largely occupied with the injury to the temples of Philae and Nubia, owing to the Aswan Dam, and Maspero published a volume in 1909 on the subject. Of original work during the second tenure at Cairo there are frequent papers but not many volumes. The catalogue of Persian and Ptolemaic sarcophagi was begun, historical discussions were written for the volumes describing the discoveries in the Kings' Tombs, and a general account of Egyptian Art appeared in a volume of Ars Una. Otherwise the volumes were collections of earlier papers, which all students are glad to have, in a series of Études de Mythologie et Archéologie, and unfortunately publishers reproduced other and slighter work, much of which had passed out of date, with titles which claimed a fresh place for it. The Museum at last acquired a proper journal in the Annales du Service, which Maspero founded on his return to Cairo, and edited till his retirement.

The last two years, from sixty-eight to seventy, were spent in the august dignity of Perpetual Secretary to the French Academy. One of the last tasks was writing the biography and eulogium of Perrot, the previous Secretary. The horrible strain of the great war—so far more imminent and dreadful to Paris than it is to London—and the crushing blow of the death of Jean Maspero as an officer, told on a constitution which already needed rest and ease.

The final scene has been described by Père Lagier thus:—"On the 30th June, 1916, at the close of a sitting of the Academy of Inscriptions and Belles-lettres, M. Maspero began to state the works presented. He stopped almost at once, and could only say 'Mes cher confrères, je vous prie de m'excuser . . . je ne me sens pas bien . . .,' and putting his hand to his forehead, he sank down in his seat, with his head thrown back. They gathered around him. All was useless, and a few moments later, before Madame Maspero hastened in weeping, the great Egyptologist passed away without having recovered consciousness." What end could be happier, or more befitting the dignity of a great scholar!

When one looks at the whole meaning of the different sides of Maspero's character, the leading feature of it seems to have been a strong Orientalism of thought. The logical clearness which belonged to his French blood and training was not allowed to rule the whole mind. A large region of sympathy, of fancy, of meandering thought, of synthetic imagination, was reserved free from bureaucratic invasion. Often the point of view of the ancient pagan was presented so firmly, so continuously, with such conviction, with so much reality, that it might be supposed to be the writer's own belief. He seemed to be able to think himself into different states; and this was the ground of his insight into the mazes of contradictory

faiths and long-lost phases of religions. Such was the starting point for rendering the Pyramid Texts with their echoes of primeval savagery, their slaughtering of the gods and cutting up the dead. Besides this freedom from the domination of logic, there was a strong Orientalism in the manner of writing. The style is rather more like Herodotos than systematized as a modern; in some cases, perhaps, more oriental than Herodotos. The reader has only to take his guide's hand and be led on patiently to one picture and another, to accept all that comes and enjoy it without continually looking at his watch. It is all interesting, all worth while, even though there is no index, hardly any contents, no list of pictures, and one never knows what will come next. Another Orientalism was the character of a benevolent autocrat. So long as anyone placed himself in Maspero's hands he was treated fairly and often with generosity; but once appeal to regulations, and the regulations had been repealed, or were inapplicable, and mysterious difficulties arose. Yet another oriental trait was the habit of attending to everything, large and small. It is a habit that soon grows on a capable man working with less capable subordinates; the petty details of administration were not firmly deputed, but were continually breaking in on more important work. In the midst of settling business of serious value, there would be incessant interruptions about trifles, to which Maspero turned aside for a few minutes, and then instantly twisted round and went on with previous affairs. It was astonishing, almost Caesarian, but it did not make the most of the years of life. When writing at discretion in Paris, Maspero usually stood to his desk as a substitute for exercise. The one chair in his study was piled high with books, and a visitor had to stand as well, or to settle, crosslegged, on the parquet floor.

A leading feeling with Maspero was his love of books, of bibliography, of wide spaces, noble margins, and good display. He revelled in quoting the full title of every book each time he referred to it. No matter how many dozen references there were to a volume, it always had its half line of full title, in the deep footnotes that often took up half the page. It would have been a sin against the dignity of literature to crop a name to the poverty of a few initials. The Cairo Catalogue conscientiously carries out this principle, and dozens of similar objects are each identically described over many pages. It is magnificent, but it is not archaeology, and such spaciousness restricts the Catalogue to the wealthy libraries. This essentially philological, philobiblical, conception of things was not compatible with an interest in scientific classification or registration, or a care for the physical nature of material. It belonged essentially to the scholastic rather than the physical type of mind. Maspero would always rather edit a text than discover it; the one he did brilliantly, in the other he took no part.

Those who worked under him ever had a warm feeling for the kindness and thoughtfulness of his control. Illness or difficulties were allowed for in a generous spirit, and he seemed to be the father of the Department. Those with whom he had to do business as excavators, know how he endeavoured to secure the rights of the Museum with the least annoyance to others. His choice of objects was always in the interest of knowledge, facilitating the preservation of groups, or allowing material to be studied and later returned to the Museum. The worst experiences were due to the absurd requirements put in force by government interferences, from time to time, without any official understanding of the subject. Egypt is a thicket of conflicting regulations and interests, legal and illegal. To reconcile them all is impossible, and, happily, not expected. Maspero, with oriental intuition, knew how much it was useful to see or to understand, how much could

be ignored, when to be legal, when to be illegal. He steered through complications which would have wrecked a less elastic management, and in most cases—though not all—carried the good will of others with him. He was, perhaps, the man who won because he made the fewest mistakes. Under the clearer conditions of a unified government, now established, we may hope that a Director will not need so much diplomacy in his department, and our best wishes are that the war may spare Maspero's successor to improve upon the administration of so great a head.

KING ZÊT OF THE XXIIIRD DYNASTY.

In the first issue of this Journal, p. 32, Prof. Petrie propounded a new theory to account for the previously unexplained entry, "Zêt, 31 years," which is found at the end of the XXIIIrd dynasty in the Manethonian chronology, as given by Africanus. The solution suggested was that this statement goes back to a query made by Manetho, who was puzzled to know who ought to be described as king at this disturbed period, his note taking the form of some derivative of $\zeta\eta\tau\epsilon\omega$, "I search after," for which a natural contraction would be $\zeta\eta\tau$. If I may be allowed, I should like to make an alternative suggestion, at the same time welcoming Prof. Petrie's view as being fundamentally right, and affording for the first time a sound basis for discussion.

It is, perhaps, not sufficiently brought out in the article referred to that it is known independently that $\zeta\eta\tau$ was used to indicate a query, and that such notes were taken up into the text by careless scribes. "Sometimes we find at work a more intelligent critic who annotates the MS. with signs meant to point out corruptions, e.g., quaere), r(equire), $\zeta(=\zeta\eta\tau\epsilon\iota)$, and gives variants in the margin from other MSS." (Prof. Clarke, Recent Developments in Textual Criticism, Inaugural Lecture, 1914, p. 12). "The casual jottings of readers and correctors are often imported into the text. Among such may be noted, $\zeta\tau$, i.e., $\zeta\eta\tau\epsilon\iota$ (Aesch., Choeph., 351, 530)" (F. W. Hall, Companion to Classical Texts, 1913, p. 194).

Fully accepting, then, the origin of the alleged King Zêt in the misunderstood contraction, there are three arguments which appear to preclude us from believing that the query was written by Manetho himself:—

- (1) Such a note would be made by the author for his own guidance and it is very unlikely that it would be allowed to remain in the completed work.
- (2) There is every probability that the mistake was made after Manetho had been epitomised. Not only would it be much easier, then, for the note to be taken into the text, but, when taken in, it could hardly appear otherwise than as an additional king. If, on the other hand, it was found in the original work, while a mistake would be possible, it would be difficult for it to take that particular form.
- (3) If the supposed mistake were made in copying an epitome, it is quite natural that it should exist in Africanus and not in Eusebius. There is, of course, no question of each writer exercising an independent judgment on the text of Manetho, and coming to a different conclusion. The way in which the material is dealt with shows that both worked on the same list in slightly different recensions. It is much more likely that the copy used by Africanus was descended from the annotated copy, while that of Eusebius was not, than that Eusebius chose to suppress this particular king.

The alternative view which I venture to suggest is that the note was made in a copy of the epitome to call attention to a possible error in the total of the dynasty. The total in Eusebius is 44 years, while the sum of the reigns in Africanus (without reckoning Zêt) is 58. Now, if the corrector of the epitome found 58 in one copy and 44 in another, he would write 44 in the margin of the first copy. It is true that the number of years assigned to Zêt in the manuscripts, as we have them, is 31 (or, in one copy, 34); but, in view of the many changes, both accidental and deliberate, that the text has suffered, it is not difficult to understand that the disagreement may have been brought about by corruption in either Africanus or Eusebius, or possibly even in both.

FUNEREAL FIGURES IN EGYPT.

To reach the beginning of the use of funereal figures takes us far back into prehistoric customs. The multitude of little blue statuettes, which are the most
abundant of all the remains of Egypt, are only the last stage of a long past.
We must start with the existing beliefs of Africa, where the love and veneration
of the family still remains in full force. When the father of the house dies, his
widow and children cannot bear to lose all token of what he was in life to them.
They have no cheap photographs, no oil portraits, so their love takes the course of
keeping the head as long as possible. Such a head is their most cherished family
treasure. It is required to watch over the prosperity and increase of the family.
It is set up in the home, or in the family burial chapel, and there receives its
offerings at the proper seasons. At meals, before the living begin, they pray the
dead to accept of the food and drink. When any of the family marry, the newcomer must offer to the ancestor. In short the family remains one, whether in life
or in death. The spirit of this union may well make us ignore the way of carrying
it out, a way which we still imitate in keeping a lock of hair.

After all, modern man has not quite lost touch with his primitive instincts. The great convulsion of civilisation at present, has brought many things to the surface which no one thought of before. A short time ago we read of a soldier returned to England from a tornado of death, who always carried a parcel with him; day and night, at meals or travelling, he guarded it jealously. That parcel contained the head of his dearest comrade, from which he could not bear to be parted. Has not this very same feeling inspired one of the great poems of our language, and been reflected thence in a great painting? Is not "Isabella, or the pot of basil," a witness that the old instinct lingered in Italy, and could be honoured by one of the most sensitive of English poets, and the most spiritual of English painters? Let us not then despise the African, whose feelings are so far nobler than his means, when he lovingly honours his parent's head.

For the benefit of the dead person it was, however, needed to restore the head to the body, in order that a future life should be enjoyed. This restoration of the head is prominently named in the early funeral ritual of the Pyramid Texts and the Book of the Dead. "Seb has given thee thy head." "Rise up Teta because thou hast received thy head." "Nut comes to thee . . . thou movest because she has given thee thy head." "Pepy Neferkara thou hast received thy head." From these references it is clear that in primitive times the Egyptians removed the head, and afterwards replaced it.

The evidence of the graves gives the material proof of these statements of the literature. The head was removed in many of the prehistoric burials, and later replaced in the grave, laid upon the body, or on a pile of stones. In many cases the head was lost, or buried elsewhere, and the body remained without a head, but placed in such a position, with offerings so placed on the neck, that it is certain that it was laid in the grave headless. As late as the HIrd dynasty we know that the chief noble of the capital, at Meydum, was buried after removal and restoration of the head.

The next stage was the provision of a stone image of the head in the grave, in case the actual head was lost or injured. Such stone heads are found in tombs of

the IVth dynasty (see Ancient Egypt, 1914, 125; 1916, 48). These heads were not supposed to receive offerings, but were always placed in the tomb shaft close to the chamber. They were thus distinct from the funereal figure in the tomb chapel in which the spirit of the dead received the benefit of the offerings. The head is to ensure that the future life of the mummy should not be destroyed owing to its lacking a head.

But though the head was thus to be restored to the body for its own benefit, the virtue of it for the descendants should not be lost. The African now makes a funeral image of the bust of the dead person, or a whole sitting figure. Thus in place of the head which was preserved in the family to receive offerings, a bust is provided for the same purpose, and the family offerings are piled before it in the chapel.

We see then how the Egyptian had provided for the perpetuity of both parts of the African ceremonial. The benefit of the head to the body was provided by placing a model of it in the tomb. The benefit of the head to the descendants was provided by the funereal statue in the place of offerings. The earliest of the private statues is the kneeling figure of the Hnd dynasty at Cairo. In this, the deceased adores Thoth, and so perpetually "He gives an offering, the washer of the high priest of Tehuti, beloved by Tehuti, Dat." But this is hardly of the class of funereal figures, but rather a worshipper in a temple. The standing and seated figures placed in the tombs of the HIrd dynasty are the true equivalent of the African figure placed in the chapel of offerings. They, however, do not lead onwards to the ushabti figures; they are always in the ordinary dress of living persons, and not swathed as the dead.

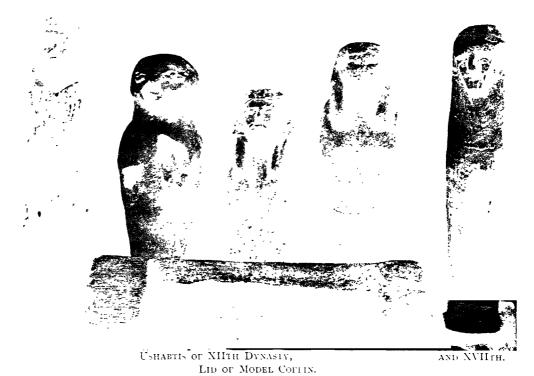
After the burial of the stone heads in the IVth dynasty we lose sight of provision for the perpetuity of the mummy. Probably the custom, not being noticeable, dropped out of use like all such hidden formalities. The great destruction of tombs and bodies at the break-up of the Old Kingdom is reflected in the literature, as Breasted has remarked; and the sight of broken tombs and wrecked mummies led to a revival of the custom of the stone head. But as it was not only the head, but the whole body, that was often missing, so a stone image of the mummy was prepared that it might serve indestructibly in place of the actual mummy.

These stone mummy figures appear at first as a plain bandaged mummy, without any hands or detail except the face, which gave it personality. The next stage was when hands were added, in order that the mummy could act. After that the mummy figure acquired arms, which are shown crossed on the breast.

The earlier figures are quite plain, but soon it began to be felt that some written definition should be placed upon them. In the end of the XIIth dynasty appears the declaration of an offering to Osiris that he may grant the deceased to come forth happily in the next world, and to behold the rising sun. On another figure the old tomb inscription is placed, praying Osiris to grant food and drink for the ka of the deceased. On another the source of the figure is stated, as being made by favour of the king. On other figures only the titles and name are placed. Thus there was no uniformity or fixed idea concerning these mummy figures; they were not a part of the older ritual, and their status varied rather according to the views of the family.

In the poverty and gloom of the Hyksos Age, tombs are rare and the furniture scanty. But as soon as the old civilisation stood on its feet again, the mummy figures are found, sadly degraded, almost beyond human form, yet with the old

formulae. In place of hard stone and fine work, they are roughly split pieces of wood with an attempt at a face marked on them. The simplest inscription is the bare name, asserting that the figure is such a person. These were placed in pottery or wooden coffins, so as to prove that they are really the mummy, and capable of acting as the person. A common formula is that they were made by a mother or a brother for the dead, "causing his name to live." This phrase has generally been supposed to refer to a descendant perpetuating the family; but here it must mean that the figure causes the name to live, that is, when the mummy is called on to act in the next world, the figure will do so instead and cause the name to live when called. The old formula of an offering to Osiris, that the dead may come forth to live in the next world, is continued from the XIIth dynasty. The names of the gods upon these figures throw light on the history of the people. Down to the XIIIth dynasty—when inscriptions almost end—the gods are usually named singly, or if several together, the plural number is used. Now in the XVIIth dynasty, the



names are largely compounded as Ptah-Seker, Ptah-Osiris, and Ptah-Seker-Osiris. This marks the fusion of the separate tribes who worshipped different gods, and it shows that the great drive of the Hyksos migration had forced the tribes into union much closer than before.

Not only were inscriptions continued from earlier custom, but new forms were brought in as a personal choice, apart from any continuity. One figure bears an order "O Tetames! wander to seek Tetanefer a brother who had died before), go around if sand is being brought for thee," that is, help to provide for the other brother. Another has, after the usual formula, an order "Tetames wander to seek and he (the other brother) will be found." Another reads: "Pamedu wander to seek Tetames, that he may call by name to the ka of Tetanefer. If you are told to carry sand of west to east say 'I go.'" Here a family servant is ordered to look out for his master's ghost, and tell it to call on the help of the previous brother who

was an established inhabitant of the next world. These messages to the dead show us the belief in the free action of the dead, and their life like that they had on earth.

Here, then, mere scraps of rough wood were supposed to personate the dead, to be able to seek one another, and give information, and evidently to carry on business as if alive. Strangely a first-hand description of this belief has come down to us from Roman times, which agrees so exactly with the magic value of the early figures, that it is clearly descended from that. Lucian, in his dialogue on lying, gives a story by Eucrates as follows:—

"While I resided in Egypt, whither I was sent very young by my father, for the purposes of study, I conceived a desire to go up the Nile to Koptos for the sake of hearing Memnon, who at sunrise utters such surprising tones. I did hear him; not as the generality do, yielding a bare sound without meaning, but I heard a real oracle out of Memnon's own mouth in seven verses. On our return, there happened to be in the same ship with me a man of Memphis, of the sacred order, with a shaven crown, dressed entirely in linen, always absorbed in meditation, speaking very pure Greek, a tall man, lean, with a hanging underlip, and somewhat spindleshanked. When I saw him, as often as we went on shore, among other surprising feats, ride upon crocodiles, and swim about among these and other river animals. and perceived what respect they had for him by wagging their tails, I concluded that the man was holy, and sought to ingratiate myself with him that he might communicate to me his secrets. At length he persuaded me to leave my slaves at Memphis, and to follow him alone, telling me that we should not lack for servants. When we came to an inn, he would take the wooden bar of the door, or a broom, or the pestle of a mortar, put clothes on it, and speaking over it a magical formula, make it walk, and be taken by everybody for a man. This servant went to draw water for us, did the cooking, arranged the furniture, and showed itself in every respect an intelligent and active servant. Then when Pancrates no longer needed it, by a second enchantment it became a broom if it had been a broom, or a pestle if it had been a pestle. One day, hiding myself in a dark corner, I heard, unknown to him, the magic formula. It was a word of three syllables.

"Next day, when my Egyptian was occupied in the market, I took the pestle. I dressed it, and pronounced the three magic syllables, and ordered it to go and fetch water. It brought me an amphora full. 'Enough,' I said, 'do not bring more water, become again a pestle.' But it would not obey me, it continued bringing water, and filled the house. I knew not what to do. I feared Pancrates would be angry on his return, as he was when he did come. I seized an axe, and split the pestle in two. Immediately each piece of wood took an amphora, and went to fill it with water, so that in place of one servant I had two. At this point Pancrates returned, guessed at once what had happened, and turned again to wood my two water carriers, as they had been before the enchantment."

Here, exactly as with the ushabtis, a shapeless piece of wood can by enchantment have all the activity of the person intended; and even if split in two, as roughly as many of these figures are split, yet it is just as effectual. It may even be that the magic word of three syllables was the title of *shauabti*, possibly meaning appointed for satisfaction, or some such sense.

It is on these rough wooden figures of the XVIIth dynasty that the word shauabti first appears, as "This shauabti (is) Aohmes Săpaar," or "O Shabti of Sen-hetep, made by his brother making his name to live, Aoh-hetep." In only two

instances have we the older royal offering formula overlapping the use of the word shabti. An amplifying was thought needful, so a longer form of repetition is "Shuabti this, Aohmes, if one summons thee to all work in the underworld 'I am doing' say thou, as a servant; if summoned to fill water channels or to carry sand east for west 'I am doing' say thou." The name is variable in form, either shuabti, shabti, or ushabti.

The next idea is the numbering of the workers, as a fixed corvée of Osiris. "Shabti this, Tetames, if is numbered Tetames to do all works that are to be done in the underworld, to make grow the fields, to fill the channels, to produce to



transport sand of the east to the west, 'Behold me' say thou." This is the first extension of the formula to field cultivation. Here the ushabti is the very man, identical with him for all his duties. This is extended by the phrase that all the work is to be done "as a man at his business," or that which is under him, or in his control.

At this point two changes come in. The deceased has the name of Osiris given him, showing his identity with the god. After this deification of the man, it is evident that the identity of the ushabti with the man has to be dropped out of

sight; it is the first step in reducing the ushabti to be a slave figure. The second change was putting the word *sehez* always before the formula. It seems most likely that this is an instruction to the deceased to "make clear" to the ushabti what his work is. For all these changes see pp. 160, 161.

After this a new order of things begins, the ushabti is furnished with tools to work, and a ribbed wig like a living person; the phrase not only of numbering the workers, but of reckoning them comes into use. Soon after is a new order directing the ushabti to smite all evils for the man; this implies that the ushabti was not only to work in place of the man, but that it was to be a bodyguard to the man, thus entirely parting it from the old idea of being a substitute for the body if destroyed.

These many fresh additions show that the formula was growing in the XVIIIth dynasty, and was continually fluctuating in the phrases and their order. Among the variations, on one is the order to work: "Be strong with the hoe in the pools"; another refers to being summoned daily; another declares the ushabti to be one of the field serfs; another, that it is "of the court of servants." One ushabti is told "listen thou to him who made thee, do not listen to his enemies." The future official bliss of the dead is declared, after naming the labours of the ushabti, as "The Osiris Bakenamen is harboured in peace at Amenti as chief of a city."

Toward the close of the XVIIIth dynasty the ushabti was looked on more and more as a mere slave, apart from the mummy or the man. Then there was no reason to be restricted to one, and half-a-dozen or more were made. The need of compelling work is always before the Egyptian mind, so taskmasters appear armed with a whip, and become a regular class in each group. In the XIXth dynasty, and down to the XXVth, the inscriptions continually become shorter and more corrupt, until they disappear. Then the figure dwindles, and what had been a large stone figure is reduced to a tiny dab of mud.

The revival of Egypt, which we commonly look on as due to the XXVIth dynasty, must really be put to the credit of the Ethiopians of the XXVth dynasty. It was then that fine work reappeared, that the ushabti system was revived. It is the figures of Queen Amenardas and her vizier Horua that show an entirely new style, about a generation before the XXVIth dynasty began. These were cut in brown serpentine, and well inscribed at full length. Private ushabtis also appear in a fresh style at this time. The custom of having overseers disappeared. The figure is always bearded, and a back pillar became a constant feature. Part of this revival was the establishment of a standard inscription, which is given most completely on the beautifully engraved serpentine ushabtis of Peduamenapt, who had the largest private tomb in the country, at Thebes. This sums up every phrase that had obtained currency, into a complete formula: "Make clear, Osiris, chief reciter, Peduamenapt. He says, O shabti thou, if one calls, if one numbers, if one reckons, the Osiris, chief reciter, Peduamenapt to do all works that are to be done there in Kherneter, then thou shalt smite evils there, as a man at his business; Behold him,' say thou if one numbers at any time, for action there, to cause to grow the fields, to cause to fill the channels, to transport the sands of the west eastward and vice versa, 'Behold me' say thou if one seeks the Osiris, chief reciter, Peduamenapt, 'I am doing it, behold me,' say thou." After this there was no variation except by shortening and corrupting the text. For royal ushabtis fairly good work and inscription are found for over three centuries down to the close of the Kingdom. For private persons they deteriorated until in the XXXth dynasty the inscription is reduced to merely a name, or often not that, and the work is of the roughest, down to mere slips of pottery with scarcely a human shape.

There were thus three periods of these substitutes for the mummy, (1) the XIIth dynasty when fine work and brief inscriptions were used, which degraded to the roughly split bits of wood in the XVIIth; (2) the XVIIIth dynasty with its great variety and long inscriptions, which degraded to the little lumps of mud in the

USHABITS UNDER AMENHETER II.
MIN-MES. HATHER-HAT. SADIOMIA.





USHABITS OF THE XXIST DYNASTY.
HENT-TAUL. PANEZEM. NESIKHENSU.

XXVth; (3) the XXVIth dynasty figures with pilaster and beard, well inscribed, which degraded to the barely human form in pottery. There is no evidence that any ushabti or any regular scarab was made after the Greek conquest.

We have passed over the Aten episode in the XVIIIth dynasty, which changed the ushabti for a time, as it changed everything else in the religious life of Egypt. The title ushabti was dropped, the claim for work vanishes, the labours of agriculture in the underworld disappear. All that was beautiful was retained, in this form:—A royal offering given to the living Aten who makes bright the earth with his beauties; may be give sweet wind of the north, a long duration of life in the excellent Amenti, cool water, wine, milk, gifts of all young flowers, for the ka of the deceased.

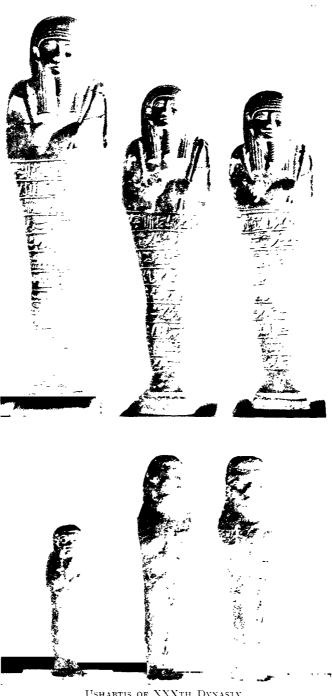
The material nature of the ushabtis has been partly noted in the account of their changes, but it may be stated here consecutively. The earliest figures in the XIIth dynasty are of fine hard white limestone, beautifully made, but without any sign of hands. Rather later they were of brown serpentine, or of wood, and hands or arms are shown. At the end of this first age only wood was used and that very coarsely sawn or split, with a rough attempt at features, sometimes merely a head hardly distinguishable from the feet. The inscriptions are always written with ink.

The revival in the XVIIIth dynasty began with large, boldly cut, figures in limestone, and wood continued to be used, as the largest and finest figure—that of Nehi-is of wood very finely engraved. Other stones came into use, mainly black limestone, black steatite, and alabaster, which are often beautifully engraved in the middle of the dynasty. Under Amenhetep III and IV granite was used for royal figures. Pottery began to be used about the middle of the dynasty; at first engraved and coated with stucco and colour, then cheaply moulded, inscription and all, then merely painted. This lent a fatal facility to degradation, and in the XIXth dynasty the roughest pottery figures with a mere pretence of a name, or none at all, served as ushabtis. The wooden figures also became continually rougher, but they were always cut, not merely split, and had some semblance of hieroglyphs on them. The great growth of coloured glazes at the close of the XVIIIth dynasty led to using them for ushabtis. At first most beautifully inlaid with varied colours, or glazed on engraved stone, they soon became uniformly green or blue, with written inscriptions, as those of Sety I. Here the way was open to the most complete degradation. In the XXIst dynasty-even for royal figures-the work is of the roughest, and the inscriptions very carelessly written, only redeemed by the richness of the blue glaze. After that smaller and smaller sizes were made; the colour became a dull green; the inscription dwindled to a mere name, or was entirely omitted; the glaze was replaced by green paint, the siliceous body by common pottery; then mere yellow marl was used, and lastly black mud; the final stage was in the XXVth dynasty, when the black mud lost the faintest pretence of blue or whitewash on it, and remained a black and formless dump, smaller than the little finger. Some other experiments were tried in the course of this decay, such as black mud figures, varnished, and with yellow inscriptions (XXIst dynasty); pottery figures, with white or yellow wash, and neatly inscribed; rough wooden figures painted green to imitate glaze; and impressed pottery figures, the oversecr with an inscription in relief, and the worker with the same stamped in.

The third age began in the XXVth dynasty with engraved serpentine figures of fine work. Well glazed figures also appear with vertical columns of inscription. Very soon a fixed type was established, with beard and back pilaster, covered with green glaze or, rarely, blue. This was fairly maintained for royal figures, but ordinary ones continually degraded, with coarser work and shorter inscriptions. By the XXXth dynasty few were inscribed, and those only very illegibly with the name. The glaze had become blackish green, the modelling very coarse. With

these were also very rough pottery figures with a dash of colour on them. Such is the last stage of the mummy figure, which—so far—has not been found of Ptolemaic times.

USHABTIS OF EARLY IN XXVITH DYNASTY. HERUZA, PRINCE OF THE FAYUM.



USHABTIS OF XXXTH DYNASTY. GREEN GLAZE AND ROUGH POTTERY.

Regarding the numbers buried, they were single figures of the mummy till the middle of the XVIIIth dynasty, and rarely more till the end of the dynasty.

	1. Shuabti this Aohmes				
		2.	19 19	Tetares	
4. Osiris Tetamesu		3. O	19 11		
			.,		
5. Make clear Nel	ni	says he	,, ,,		
6. " " " Use	rhot	,,	,, ,,		
7. " " Any	,7	** **	,, ,,		
8. " " Ped	uamenapt	,, ,,	,, ,,		
Make clear Osiris N says	he O	Shuabti	this,	N, i	f one calls,
		頭到		N A	
1. to do all works				of Khe	erneter
1. to do all works 2. " "	that are	to be done		of Khe	erneter
2	that are	to be done			
2. " " "	,, ,			in	"
2. , , , , , , , , , , , , , , , , , , ,	,, ,	,	there	in 	"
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if one numbers, at any time 8. Behold him say thou, to act there Behold him say thou, if one numbers, at any time there to act 1. or sand east for west of the 2. to transport the sand east to the west 3. " east west 4. west east 6. 7. ,, east and vice versâ west transport the sands of the east to the west and vice versâ # a c = = 2 ĭ <u>~</u>

HISTORICAL DEVELOPMENT

1. if one summons thee if one numbers 2. Tetares 3. Qedhetep 4. Tetamesu 5. Nehi 6. if one reckons 7. Any in 8. Osiris Peduamenapt if one numbers, if one reckons, if one summons thee 3. as a man at his affairs 7. then shalt thou smite for him evils 8. " " " there thou smite for him evils there, then shalt as a man at his affairs. to be full I. to cause the channels 2. to cause to grow the fields, to cause to be full the channels 3. 4. б. 7. to grow the fields, to cause to be full the channels. to cause I. I am doing, reply thou as a servant if summoned 2. Behold me say thou 7. if numbered at any time Me if numbered at any time I am doing Me Behold me say thou

OF THE USHABTI FORMULA.

When they came to be regarded as servants, rather than as copies of the mummy, half-a-dozen or a dozen were buried, as in the XIXth dynasty. The royal ushabtis of the XXIst dynasty were by the hundred. Private ushabtis of the XXIInd dynasty were about 50, in the XXVth 400. In the XXVIth numbers from 11 to 400 have been noted. Details of styles and errors show that the large numbers were made in factories by many workmen jointly, and that the inscriptions were read aloud to the engravers.

The subject of ushabtis is not only a prominent branch of Egyptian manufactures, it is a long chapter in the history of religious ideas and their growth, it is a great example of the law of resuscitation and decay. Each period starts with nobly good work, very soon the finest style is reached, and then almost imperceptibly each generation, each year, seems to have been content with something almost as good but rather cheaper, until the degradation was complete. That is the history of all human work in Art, and we can trace it in every period and every land whereof we know enough. It shows that excellence and invention are individual, that it is the single great impulse that lifts a people, and, after that, imitation is the only resource of later generations.

Although the variations of the ushabti texts are so incessant that it is difficult to find two alike, as they vary even in the same group, yet a clearer view of the whole subject can be obtained by taking the earliest typical example of each new clause, and showing these as a connected historical chain of growth. For this purpose in the preceding tabular view of these changes (reading across the two pages) four of the rude wooden figures of the XVIIth or beginning of the XVIIIth dynasty are quoted, numbered I to 4; then Nehi, Userhat, and Any (5–7) of about the time of Tahutmes III; after which decay sets in until the revival of which Peduamenapt gives the most complete text, marked 8. The fine figures of Heruza are almost identical with this, except in placing plural forms for singular after the word "affairs"; and this type continued to be used till the end, in shortened and corrupted forms.

W. M. F. PETRIE.

EGYPTOLOGY IN FRANCE.

In the volume of the *Monumenti Antichi* for 1915, p. 117, etc., Signors Paribeni and Romanelli give a Greek inscription from Aspendos, a city upon the bank of the river Eurymedon in Pamphylia, which is important for the history of the Lagides. It is a decree of Aspendos concerning Ptolemy Philadelphus, and proves the fact asserted by Theocritus in his 17th Idyll, that Ptolemy II for a time held possession of Pamphylia. It would appear that Egypt lost her hold of the territory shortly after 272 B.C., when Theocritus composed his poem, because the famous Adulis inscription and Polybius both assign a conquest of Pamphylia to Ptolemy III Euergetes. Perhaps Philadelphus only occupied part of the province, and its conquest was completed by Euergetes, for Aspendos is situated but a short distance up the course of the Eurymedon, and so may have been in the power of Ptolemy II, because he had command of the sea, and his hold upon the country was still not uncontested further inland. Unfortunately, the new-found inscription does not afford material for fixing the year when it was engraved, or that referred to in the text.

In their record of gratitude to Ptolemy, the authors mention a personage then connected with their town, named Leonidas. A soldier of that name is known as taking part in the Cilician war of 309 B.C., but it is not probable that this is the same personage. M. Bouche Leclercq in his *Histoire des Lagides*, I, p. 194, refers to a suggestion of Gescke, that after Antigonus' naval victory, about 265 B.C. at Cape Leucolla, the portion of the coast of Asia Minor held then by Egypt was lost to her, and this, he says, would explain why the monument of Adulis does not allege that Philadelphus left Cilicia and Pamphylia to his successor Euergetes. There can, however, no longer be any doubt as to Theocritus having been justified in assigning possession of Pamphylia to the Pharaoh in his poetic panegyric of Philadelphus. Now that Prof. Strack, who so carefully collected all inscriptions concerning the Ptolemies, is no longer able to do so, it is well to note them in Ancient Egypt.

In the Bulletin de Correspondance Hellenique, M. E. Cavaignac has recently printed an important article entitled "Le Chronologie Egyptienne au IIIme Siècle avant J.C.," in which he indicates the correct method of arranging a concordance between the native Egyptian and the Macedonian calendars. His system is almost entirely founded upon statements in Ptolemaic papyri, chiefly those in British publications such as "Hibeh Papyri" and the "Revenue Laws." But he also quotes various unpublished papyri, some of them communicated by M. Jouquet, and therefore probably these form part of the collection at Lille which is perhaps destroyed. M. Cavaignac also quotes some Tebtunis texts not yet edited. He provides a table showing the correspondence between the two series of months from 253 B.C. to 214 B.C., embracing the reigns of Ptolemies Philadelphus, Euergetes, and Philopator. His essay will be very useful to all engaged in ascertaining the dates of Ptolemaic papyri from the wording of their contents.

In Vol. XII of the Bulletin de l'Institut Français de Caire, M. H. Gauthier gives a description of a number of ancient Egyptian antiquities in the Institute's possession. Among those deserving of mention is a seated statue of Teta Khart (or Teta Sheri), whom M. Gauthier shows was the mother of Ahmosis I, founder of the XVIIIth dynasty. This statue bears nine lines of text, and this inscription completes the missing part of the words upon a duplicate statue of this lady in the British Museum, see Guide to the Egyptian Collection, 1909, No. 187. Another interesting monument at Cairo is a stele recording offerings to Prince Merimes, as "royal son of Kush, or governor of Ethiopia, for his father Amenhotep III." For this proves divine worship as being paid to a personage who had never been a Pharaoh. Where the tablet was found is unknown, and so it is possible it was erected to the south of Egypt, wherein the royal son of Kush would be equivalent as ruler to a king, and so be a becoming person to receive worship as a god. One Old Kingdom text given by M. Gauthier upon p. 126 is curious because of the numerous animal hieroglyphs employed by the scribe. They exceed ten per cent. of the whole. It also preserves a very early specimen of the pre-Christian 4.

The second part of Vol. XI of the Bulletin de l'Institut Français d'Archéologie Orientale, published under the direction of M. Pierre Lacau, contains a lengthy discussion by M. Gustave Jéquier of the origin and meaning of the signs \bigcap and \bigcirc , including a list of many of the words in which the \bigcap is used as a hieroglyph, as the application of it for this purpose illustrates the question. The two symbols, M. Jéquier points out, are very similar, and in many cases one seems to take the place of the other, but with the exception that deities never hold the \bigcirc instead of the \bigcap . His conclusion is that both signs do not represent any familiar object of civilised usage, but are true symbols made in the image of two primitive talismans, some kind of knots formed by means of the stems of aquatic plants. Both are emblematic of life, with the difference, that the \bigcap concerns the life divine, and the \bigcirc an eternal life for mankind, also perhaps for things, but has no connection with that of the gods.

M. Pierre Montet describes the Egyptian hunting nets chiefly used for waterfowl, and by figures shows how ingeniously they were designed and worked to effect their object. Whilst wide open to embrace a considerable area they, by a sudden pull, were quickly closed to form a trap. A great deal appears to have depended, according to scenes in the tombs, upon the stealth and silence of a boy, or man, concealed in the reeds, who signalled the proper moment for closing up the net. For an example of this see *The Rock Cut Tombs of Meir*, Vol. II, p. 13.

A long article by the late M. Jean Maspero edits a Byzantine papyrus relating to Horapollo, who was the author of a work upon Hieroglyphics still partially extant. It concerns the misconduct of Horapollo's wife who had gone away with a lover, and the manuscript incidentally throws some light upon Roman law. It also proves that of two authors who bore the name of Horapollo it was the latter one who wrote the *Hieroglyphica*.

M. Henri Gauthier endeavours to adjust the reigns and chronology of the various Pharaohs named Shishak, or Chéchanq; M. Daressy had treated of this question in the *Recueil*, Vol. XXXV, and concluded there were five kings of this name. M. Gauthier reduces these to four, Chéchanq I; Chéchanq II si-Bastit; Chéshanq III reigning between the former and Pamai; and Chéchanq IV, later than Pamai.

M. Georges Daressy describes the Sièges des Prêtres, and gives an inscription of ten vertical lines concerning this piece of furniture appropriated to a first prophet of the statue of a Pharaoh named Imhotep. He had to be duly installed upon the seat and henceforth used it to sit with his brother clerics and wise men who had similar resting places, and converse with them, or occupy it at all temple functions unless he was personally employed at the service.

By far the most important essay in Vol. XII, Part I, of the Bulletin is that of M. Daressy upon an Egyptian Zodiac which has lain for a long time in the Cairo "Institut." It not only contains the Zodiacal signs, but also in a smaller circle beneath them the forms of symbols of twelve deities whom the Egyptians associated with these particular signs. M. Daressy publishes a photograph of this Zodiac and also of the planisphere of Dendera, for his article is not restricted to the study of the Egyptian Zodiacal signs only. As its title of L'Égypte Céleste indicates, it concerns the imaginary Egypt of the heavens, which was a duplicate of the terrestrial one. The priests endeavoured to utilise the constellations in the solar path as duplicates for all the Nomes of Egypt. The deity of each Nome had to be found in the sky, in the order in which they would be passed through if the Sun-god were descending the Nile. The Zodiacal signs being insufficient to take the place of some forty Nomes, the planets and some constellations were pressed into the service. M. Daressy rather, in his researches, works back from the celestial Egypt to utilising it for improving our knowledge of the geography of its earthly counterpart in the earliest times, in respect of the special deities and their famous Nome shrines (see further notice p. 185). The subject requires taking up now from another direction, that is the correspondence between the stellar symbols of gods upon the many Babylonian Boundary Stones that have been published by Scheil, Ranke, and others, and those of the Egyptians and Greeks. They are identical in several cases and this line of research is likely to prove very fruitful.

In an article entitled "Greco-Arabica," M. Jean Maspero proves that a supposed personage named Melitus, according to Mr. Evett's translation of the life of Andronikos in the *History of the Patriarchs of Alexandria*, is an error of the Arabic translator, or copyist, the original word having been *milites* "(troops)." M. Maspero points out that the statement in the "Life," that Andronikos remained safe in some monastery at Canopus when Chosroes captured Alexandria, confirms the account of the chroniclers who told us that the city was taken from its western side. He indicates another error in the English version of this history of the Patriarchs, where it tells of a Syrian monastery of Ammonius near Antioch. The name should read Aftunias, the famous Monophysite monastery called Beit Aftonia.

M. Henri Gauthier describes what is known as to the career of Ziharpo, a functionary of Nectanebo I whose name was read by Brugsch as Horpta. His sarcophagus is at Cairo, and was catalogued by Maspero in his Sarcophages des Époques Persane et Ptolémaïque. It was disinterred by Mr. Quibell in 1911 at Sakkara. Brugsch, in his account of this coffin, stated it was then in Vienna, but M. Gauthier proves this to be an error, Brugsch having confused it with another, that of Nes-shu-tefnut, which was transported to Austria, but Ziharpo's was left in its tomb until again unearthed by Mr. Quibell. Numerous funerary statuettes of Ziharpo are in the Vienna, Miramar, and Marseilles Museums, and have in older times been published with his name erroneously rendered as Wauupan, and Harpnoub. His mother's name was Tefnut.

M. Henri Gauthier also gives photographs and an account of a number of monuments preserved in the French Archaeological Institute at Cairo, giving

whatever texts are engraved upon them; most of these are duplicates of similar inscriptions in various museums. M. Georges Daressy adduces ample reasons for assigning the sarcophagus found by Mr. Theodore Davis in the tomb of Queen Tiyi to that lady. Although the inscriptions have been altered to suit a male Pharaoh, evidences that they were originally written for a feminine occupant are conclusive, and he concludes that the changes in the writings were to render them appropriate for Amenophis IV. He does not however think the male mummy found in the coffin was that of this king, but that it is most probably that of Tut-onkh-Amen.

A series of "Notes sur le Dieu Montou" happily induces M. Georges Legrain to give a summary of several of the hundreds of statues discovered by him at Karnak. The remarks also lead up to a most interesting enumeration of the chief shrines and districts whereat Montou was most revered, more especially of the now almost vanished temple of the deity at Koum Madou (Medamoud), a site at which Daninos Pasha has recently carried out some excavations. All copies of texts at this temple made in the eighteenth and nincteenth centuries are collated and compared with these, and others, now known. The most important fact elicited is that of the worship of a Montou bull at Madou similar to that of Apis, Mnevis, and others elsewhere. M. Legrain does not mention whether this place is listed in the catalogue of Serapeums in the Louvre Papyrus No. 3079, and in Brugsch's Geographical Dictionary (see Pierret, Études Égyptologiques, I, p. 36, and Brugsch, Dict. Geo., p. 1063). In the volume upon the Rock Cut Tombs of Meir, by Mr. A. M. Blackman, he shows that texts and scenes at Meir suggest the keeping of a cow harim for the sacred bulls, and quotes texts indicating similar arrangements for the bull deities elsewhere. Most of the inscriptions on the Karnak statues of hierophants of Madou are of the XXXth dynasty or later. One text mentions the Amentit of the bull who is in Madou, so doubtless a catacomb similar to the Serapeum at Sakkara is concealed there and awaits discovery. A further portion of M. Legrain's treatise concerns Montou as god of Tuphium (Toud), where there also was a sacred bull representative of Montou, and shows that the full title of the temple was the Bulls' Chateau. At Toud there is also a decorated chapel, the shrine of the goddess Tanent, who in some cases is represented as a triple-headed hippopotamus.

Egyptological essays are still frequently appearing in the *Comptes Rendus* of l'Académie des Inscriptions, and two of these, by M. Moret, Director of the Musée Guimet, are of importance. One of them endeavours, and successfully so, to restore the missing part of a IVth dynasty inscription published by M. Henri Gauthier. This text did not reveal the name of the personage concerned, but M. Moret shows him to have been a certain Daou, who was born at Abydos and lived under Pepi I, Meri-ra, and Pepi II. This he does by means of fragmentary texts referring to him, and by other inscriptions using similar formulae. Daou's career is pieced together, and he is shown at various times to have been Court Page, a District Administrator, Superintendent of the Treasury and of the town at the royal Pyramid, Chancellor of the North, Judge in the Gate, Director of the Archives, Commander of the Body Guards, and an hereditary prince.

M. Moret's second essay is explanatory of an inscription published by M. Daressy some years ago, from a stone that has since so decayed that the text has perished. M. Moret renders it because its terms are closely connected with matters he discussed in his *Donations et Fondations en Droit Egyptien*. It is a sort of autobiography of a man named Beb, describing the wise use he made of funds

or property given to him by his father, during that parent's lifetime, probably at the date when Beb came of age, also of goods and property bequeathed to him at his father's decease. Although Beb was an official holding some position as governor of a royal house, and a minor post at court, he was evidently in business on his own account as builder and proprietor of a mercantile dahabeah, and holder (or owner) of real estate, and a farmer. It is to be hoped that these works of M. Moret will be republished in some collection of his essays, so as to be more accessible to students.

In the Journal Asiatique for 1914, Commandant R. Weill continues his exhaustive researches into the origin and correct succession places of the Pharaohs, who reigned in Upper Egypt, or sometimes over the united country, from the time of the XIIth dynasty to the Theban restoration. Every record he can discover of these monarchs, from those supplied by great temple or sepulchral inscriptions to those upon scarabs and amulets, is commented upon and utilised. To scholars who can recollect the days of Bunsen, Birch, and the elder Vicomte de Rougé, when the Turin Papyrus, Manetho's List, and the tablets of the kings at Karnak and Sakkara were almost the only available records of the reigns to conjure with, the advance in knowledge we now possess is indeed immense. In the article now referred to, which is Chapter III of M. Weill's work, and runs to forty pages, he treats of what he terms the historic group of the Antefs, the Sebekemsafs, and the Sebekhoteps of Thebes. He makes good use of the sarcophagi inscribed with royal and princely names at the Tombs of the Kings and elsewhere, also of the coffins and sepulchres of royalty enumerated in the Abbott Papyrus concerning robberies of tombs. He shows from the monument of Antef V at Koptos (see Petrie, Koptos, Plate VIII) that, at the era of the Antefs, not only was Egypt divided into at least two kingdoms, but the Antefs were but petty princes of Upper Egypt, the Nome of Abydos being probably their territorial limit northward. Southward their sway may have extended above the Cataracts, but Thebes was their only city of size and importance. These rulers of this restricted area were by later compilers of the royal Egyptian annals considered as being the true lineal Pharaonic representatives, but they had to accept the contemporary existence of another line of kings, and to treat these rivals as genuine kings, and as legitimately exercising the prerogatives of royalty over a large part of Egypt. It is curious that the loss of the sceptre over united Egypt by the XIIth dynasty resulted in the Theban Principate becoming endowed as the nucleus for the successors of the ancient legitimate Pharaohs. Thus in time this family became recognised as the progenitors of the New Monarchy when the foreign dynasty in Lower Egypt departed. M. Weill devotes a special chapter to Queen Sebekemsaf, wife of Nubkipiri Antef, because Oueen Ahhotep, spouse of the Pharaoh Ahmes, at a much later epoch, claimed descent from her.

Figures upon Prehistoric Egyptian and Dipylon early Hellenic Pottery.

The Metropolitan Museum of Art of New York City having acquired two magnificent specimens of the so-called Dipylon style of colossal Greek vases, they have been published by Miss Gisela M. Richter in the American Journal of Archaeology. Upon these, as on previously known specimens of this peculiarly decorated ware, are numerous figures of so-called mourners. Some of these are evidently females, and are apparently shown as nude, with both arms elevated above the head. This singular attitude is precisely that of the female figures upon

the very early vases found in Egypt, specimens of which are given in M. Capart's Primitive Art in Egypt, p. 121, etc. Herr Kroker, in the Jahrbuch Arch. of 1886, had suggested Egyptian influence for these curious Dipylon figures. This, following Prof. Paulson, Miss Richter does not agree with. But the vases now at New York display many of the figures very distinctly, and since Herr Kroker's essay several more specimens of the Egyptian type have been published, and the similarity of the two series of figures is now very striking indeed. The very early gems from Mykenae representing deities, depict these clothed in the flounced skirt, or Babylonian kanaukes, evidently copied from Asiatic cylinders. The long rows of aquatic birds on prehistoric Egyptian pottery appear again on vases from Susa and from the Greek Islands. Moreover, the Dipylon four-wheeled chariots also seem to be imitations of those on Mesopotamian cylinders, so that the female figures with upraised arms, in the attitude of "hands up," perhaps a sign of sorrow and hopelessness, may really be copied from Egyptian pottery brought by traders to Greece in very early times.

JOSEPH OFFORD.

THE ORIGIN OF POLYCHROME BORDERS: A SUGGESTION.

THE polychrome border was a decoration in general use in Egyptian tombs, dating from the XIIth to the XXth dynasty and even later. Two forms of this border are very common in the Theban necropolis. The first form is used solely to frame the scenes on a tomb wall, and the second is reserved as a decoration in the painted and sculptured representations of kiosks, and small wooden shelters or shrines.

The order of the coloured rectangles is always constant in the first form of border, namely, red, blue, yellow, green, etc., with a thin continuous line of green bordering the rectangles on both sides. The colours in the second form of border vary in their arrangement in different tombs, and the continuous band at the edges is yellow instead of green. The coloured squares are separated by a white band between two black ones, or in the XVIIIth dynasty, a black between two whites, a form which prevailed later. It has been suggested that these borders represent reeds or some similar material, bound together at intervals; but no satisfactory explanation has yet been given as to what the apparent binding really is, or how it was used.

FIRST FORM OF BORDER.



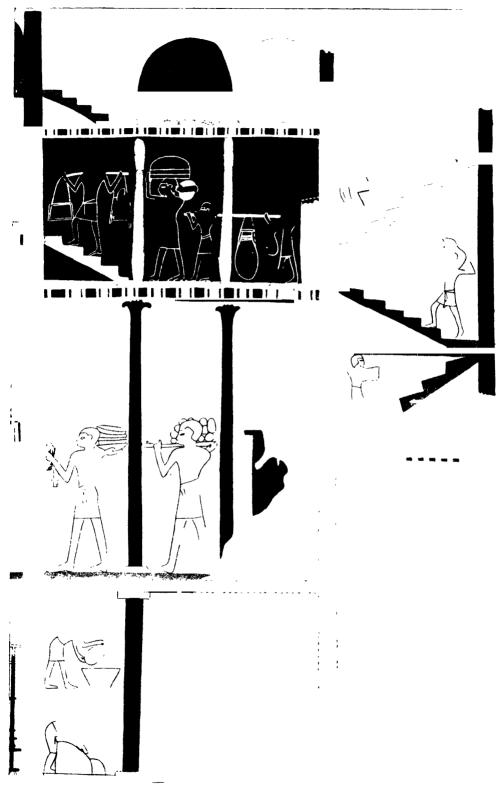
SECOND FORM OF BORDER.

A glance at the illustration of the ancient Egyptian house on the following pages shows that the coloured border was probably intended to represent a section of the flooring of a house. The rectangular patches of colour seem to represent light beams; and the yellow border line above and below them, either wood planking or, more likely, matting or slats, to form the floor and ceiling respectively.

The following method of constructing a light floor is employed at the present day in Egypt. Palm trunks (when easily procurable), or beams of wood, are used to carry the main weight of the floor, and at right angles, above and below, palm branches are lashed close together. The latter are then covered over with mats and finally with mud to form a solid floor and ceiling. Such a floor is only constructed while the house is in process of being built; that is, it is entirely finished before the walls of the room above are proceeded with. The ends of the palm branches are, in consequence, held firmly between the walls of the upper and lower stories of the house, and at first project slightly from them. They are eventually cut off flush with the outside of the wall, which is plastered over with mud when the house is completed.



House of Tehuti-nefer Huia. Granaries at Top. Private Rooms. Public Reception Room. Work Rooms at Base.



House of Tehuli-Nefer Hula-continued.

CARRYING UP OF FOOD 10 UPPER FLOORS. PREPARING LEATHER, BELOW.

CARRYING UP GRAIN TO GRANARIES ON THE ROOL.

In the building of the floor of an ancient Egyptian house the mode of procedure was doubtless the same, but in lieu of palm branches the papyrus reed was probably used. Owing to the triangular shape of the reeds in section it would be perfectly possible to make the equivalent of light beams of a square or rectangular form by lashing them together in a compact bunch; this was certainly done for columns, as imitated at Tell Amarna. The ends of the beams, and the covering of reeds or matting above and below them, would doubtless first project irregularly from the walls, as they do in uncompleted Arab houses, and they would also be cut flush with the walls, as at the present day.

The colouring of the rectangles in the separate borders illustrated, and in that which represents the flooring of the ancient house, is difficult to explain. The only solution that the writer can offer is that, in lieu of plastering over the ends of the beams and matting which were cut off flush with the outside of the walls of a house, the ancient Egyptians coloured them instead to serve as a decoration.

It will be noticed in the illustration that the flooring between the lower rooms and the rooms above is of a different nature from that just described. It is coloured red, and what apparently represents matting above it is yellow. A heavy floor (doubtless constructed entirely of wood) would be necessary in this case to support the weighty columns above, which are also coloured red, probably to represent wood. The pillars supporting the roof of the house are coloured green; and, as the weight they supported was comparatively light, they were probably made entirely of papyrus stalks lashed together.

The scenes depicted in this illustration of an ancient Egyptian house are also of much interest. It will be noticed that the lower rooms of the house are used as workshops, etc. There is a scene of a woman spinning yarn, the thread, issuing from a basket set on the floor, being passed through a ring hung from a support projecting from a column, in order to get a long length free for spinning. Two women behind the spinner are engaged with a ball or balls of yarn lying on the floor. It is not clear what the two men in the upper part of the scene are doing, as the detail here is in very bad condition.

In the next room on the right three weavers are at work sitting on low stools, with their backs to the observer. One of the looms, being exceptionally large, requires two men to work it. In the adjoining room a woman is grinding corn, and above her is a figure about to put some substance (possibly dough) into a pan. In the rooms above the owner of the house is seated in state, with a serving-girl offering him drink. Behind the girl is a man about to present a bouquet of flowers; with the inscription "Uab priest of Amen, Dhutnufer called Huia." The door behind this man is interesting, as it shows a grating for ventilation in the upper part of its framework. About to enter this door are two servants carrying flesh and bread respectively.

The upper scenes show either a guest or the owner of the tomb being fanned, and behind the fanner is a servant bearing a jug of wine. The open door in this scene should be noted, as it is apparently shown in perspective. To the right are various servants climbing stairs and bringing the necessary articles for the feast above.

The row of seven semi-circular structures on the roof of the house represent corn-bins, which are placed here out of the way of rats and other pilferers. Five of these bins are fitted with double doors.

Pictures of important Egyptian houses are exceedingly rare in the Theban necropolis, and it is to be regretted that the one reproduced here is not more

complete. The tomb in which this painting is to be seen is numbered 104 in the list of Theban tombs, and belonged to a Royal Scribe of the name of Dhutnufer. It unfortunately cannot be exactly dated, but has been conjecturally ascribed to the period of Amenophis II or Tuthmosis IV. The picture of the house is on the eastern wall of the outer chamber of the tomb; it has been badly scaled, first by a fire that occurred in the tomb, and subsequently by weathering due to the collapse of the roof.

ERNEST MACKAY.

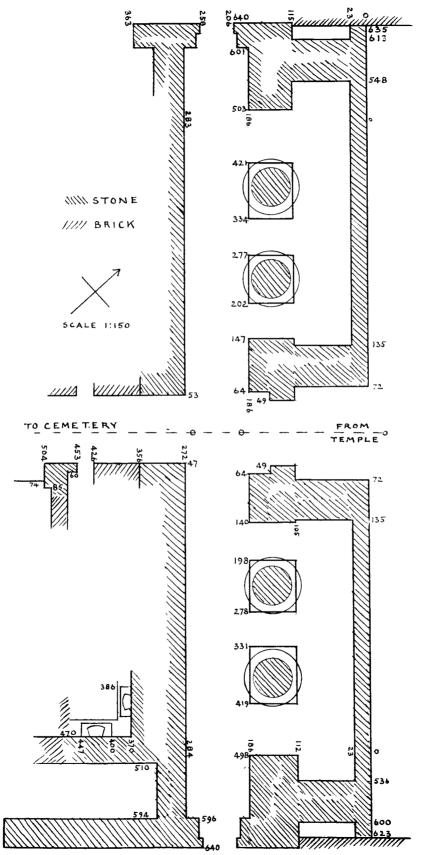
A CEMETERY PORTAL.

THE Egyptian cemeteries were not as undefined as they now appear to be. The surface boundaries would naturally weather away and disappear, but in some cases they can still be traced. At Dendereh, for instance, there is a ridge of gravel still to be seen for about half-a-mile along the desert side of the cemetery. At Abydos there was a great pylon of red granite leading west out of the temple enclosure; beyond this there was a gateway in the outer town wall of the XIIth dynasty. Through these gateways a road led out to the cemetery, and after emerging from the town wall it entered a Portal building, as the approach to the cemetery. Probably there was originally a boundary wall around the tombs, and this Portal was the official entrance for burials.

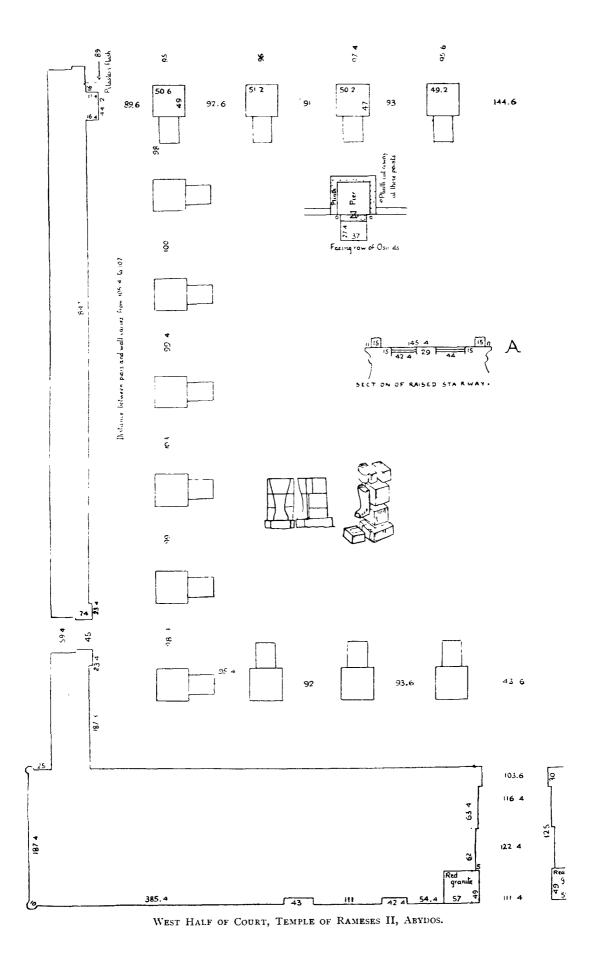
Some clearance was made at this Portal in 1902, and the late Mr. Hugh Stannus took the plan here published. His measurements have been added together, so as to state all positions as distances westward from the east face, or north and south from the axis of the front. Thus, all the similar parts can be at once compared in position. It seems strange that the inner passage should not be co-axial with the east gateway, but about 3 inches to the north of that. Yet the total lengths are given to the north and south ends, and it is impossible to assume an equal dislocation at each end, hence the shift must be in the passage axis. The columns were measured by the circumferences, giving a diameter of N. 57.8, 2nd 57.5, 3rd 60.3 inches. The base circumference shows a diameter of 87.2; hence the bases extended beyond the square foundation blocks. The pavement probably fitted in beneath them; that, being doubtless of limestone, has all been stripped for burning.

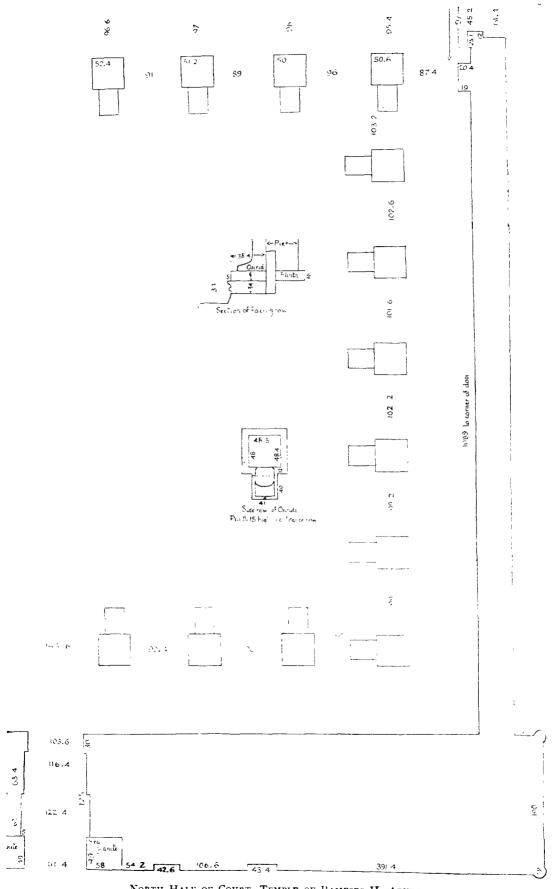
The dimensions are irregular, varying two or three inches, as in the temple of Rameses II, who also built this Portal. The intention seems to have been to build in terms of the ordinary cubit. The width of the entrance is 7 cubits, the wall at either side 3 cubits, the long hall on either side 20 cubits long, 4 wide. From the best parts the cubit averages 20'8 inches, a usual value in late times.

The western side has not been cleared enough to show the position of the foundations and ruins. After it had been partly pulled down some brick walls were patched on to it, apparently cutting into a court of Osiride pilasters. The still complete eastern part differs entirely in plan from the front of any known temple, and its ceremonial purpose must have been different from any temple ritual. From the end doorways and the covered space provided along the passage way, it looks as if planned for the gathering or dispersion of funeral processions. If, on the approach of a funeral, the cemetery staff of priests and officials flocked in at the end doors, they could then arrange themselves in the porticos at the side of the passages so as to file out in complete order for parts of the funeral procession along the axial passage. Probably the western part contained a hall, or halls, for the funeral ceremonies before proceeding to the actual tomb. The building would thus have been a near parallel to the modern chapel at the entrance of a cemetery in our own country. It would be desirable, for our knowledge of the funeral ceremonial, to completely clear this building and restore the plan of it. Unfortunately, I only began upon it during my final months at Abydos in 1903, and had not time to The various excavators in the years since then have not complete the work. attempted to clear fresh monuments or trace the history of buildings.

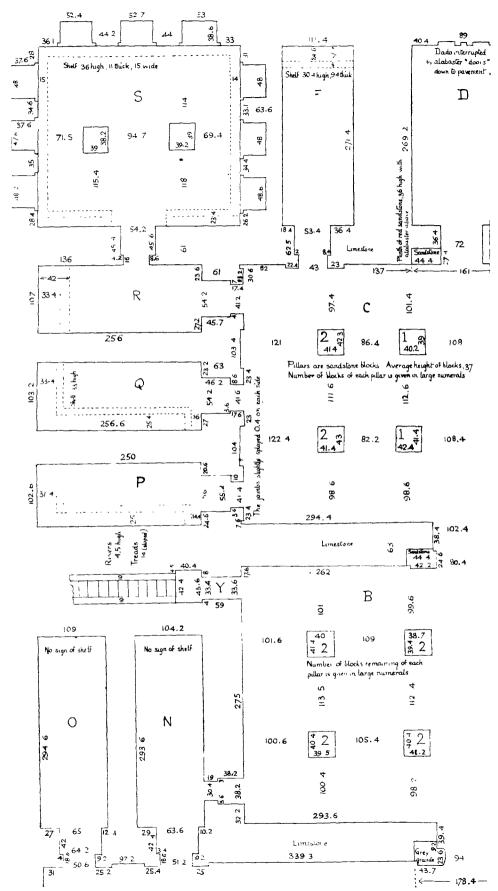


PLAN OF THE CEMETERY PORTAL, ABYDOS.

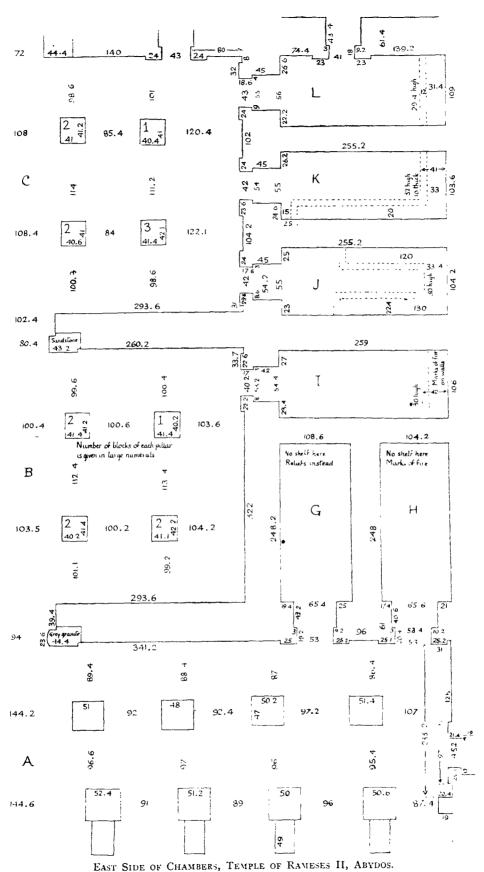




NORTH HALF OF COURT, TEMPLE OF RAMESES II, ABYDOS.



South Side of Chambers, Temple of Rameses II, Abydos.



M 2

As the plan of the temple of Rameses II at Abydos was published in our last number (pp. 136, 137), especially in relation to the views issued there, so now it seems desirable to preserve the record of the actual measurements made by Mr. Stannus, by issuing sectional plans with all the details. Miss Murray has made the drawings of these here given. First is the outer court, the two halves of which have the gateway repeated to show their connection, pp. 176-7. The details of the Osiride pillars are shown separately in the court; as also the section of the double stairway rising up to higher level of the back. On the succeeding pages, 178-9, are the details of the chambers. These two halves do not match across the pages; more of the back is shown in 178, but the back on 179 was not measured by Mr. Stannus, so the colonnade in front of the chambers is included at the bottom of the page. All of these plans, and that of the Portal, are to the scale of 1 to 150.

W. M. F. PETRIE.

REVIEWS.

Notes on the Story of Sinuhe.—ALAN H. GARDINER, D.Litt. 8vo. 193 pp. (Paris: Champion, 1916.)

This is essentially a specialist's book; intended not for Egyptologists in general, but for those whose interest lies in the language only. As such it is, like all Dr. Gardiner's work, absolutely indispensable to the serious student. The mass of information and solid learning which it contains makes it one of the most helpful books of recent years. Dr. Gardiner has relied, in a way that is unfortunately rare among scholars, on his own common sense to help him in difficult and obscure passages, and his vast knowledge of the language and literature enables him, as a rule, to prove his point. To take two cases out of many: in ll. 71-73 the words $\frac{1}{n}$ have hitherto been divided $nn \ k^2 - f$, and translated as a question. Dr. Gardiner shows that the form k^3 is impossible here grammatically, as after the negative *nn* the geminated form of the verb is always used, k^{33} ; the division of the words must then be $n nk^{3}$ -f, the verb being nk^{3} , "To meditate, to think about." This is the grammatical argument. As regards the translation of the passage, Dr. Gardiner points out that "to interpret a negative sentence as a rhetorical question because the negative does not seem to fit is a dangerous expedient, and one which must always excite suspicion." Here common sense comes into play; the meaning of the whole of Sanehat's speech is taken into consideration, and the effect which he must have wished to convey to Amu's son Neshy, whom he desired both to impress and to propitiate, is clearly discussed. Consequently Dr. Gardiner is able to translate the whole passage in a manner which carries conviction to the mind. But, perhaps, one of the best examples of through the text and tried to form a mental picture of what happened to Sinuhe after his interview with the Pharaoh, Dr. Gardiner's discussion of this passage is most interesting and illuminating. In fact, all Dr. Gardiner's discussions are worth reading, and the book is one which should be in the hands of every real student of the language.

portrait of the monarch is stamped. It must also be remembered that the Egyptians called an artist $\bigcap \bigcap$, "He who makes alive," therefore it is quite possible that the "living image" may be simply a term for a portrait. We have all heard of a "speaking likeness."

M. A. M.

La Pierre de Palerme et la Chronologie de l'Ancien Empire.—G. DARESSV (Bull. Inst. Fran. arch. Orient.). 54 pp.

This is an important study of the new fragments of the Annals, of which an account appeared in our last number. M. Daressy has very carefully examined the stones under the best conditions, and his conclusions must have full weight. On surfaces so greatly worn, where only the faintest traces of the essential signs appear, it is certain that many examinations will be needful, and many pairs of eyes should be used. By having kept back the stones for six years from the world of students, until the war broke out, the Department in Cairo hinders the study of this essential material for several years more. The hopes expressed that several copies of the Annals existed in several places are by no means certain. In so large a monument many different engravers may have been employed, and variations in thickness and lines might occur; the source of any pieces outside of Minieh is by no means sure, as only one has been found at Memphis, and that only picked out of a basket of fragments of unknown origin.

The first important reading is that of the king Athet, where traces of three strokes in the ka name were seen by Maspero, and are visible in the photograph, agreeing well with King Zer. M. Daressy agrees that Zer is the certain reading of the king's name, and not Khent as mistakenly read. But strangely he does not see the sign Zer in the three strokes visible, but would read it Kho-sekhem. It seems very improbable that this king could come in the midst of the compact series of the Royal Tombs, or that his style of work could belong early in the 1st dynasty; on the contrary, by the name, he is evidently near Kho-sekhemui, and of the dynasty of Hetep-sekhemui, the sekhemui, or two powers of Horus and Set, being prominent in the IInd dynasty. There seems no ground for transposing a king who so obviously belongs to a later group.

A suggestion is made that the sign of the king seated with full insignia is equivalent to the *nesut bati* and *nebti* names. But as it is agreed that they all appear together under the reign of Nefer-ar-ka-ra, the conjecture hardly seems worth proposing.

An interesting new view is given of the *Her-nub* title. Snefru has one falcon, Khufu two, Dadefra three, over the *nub*. The *nub* it is proposed to read in the derived sense of "to cast, model, or fashion," and connected with resurrection or renovation, as in the *nub* hall of the temple. Hence the *Her-nub* is translated the "renewal of a god." Why *re-newal* should be implied is not clear. On the proposed value of *nub* it might mean "made a god," or "made Horus," that is, the king as Horus incarnate. The meaning of the single, double, and triple falcons is not suggested. On p. 204 is a most suggestive arrangement of the IVth dynasty, showing the less important kings as brothers of the great kings, Radadef being brother of Khufu. Beside him we know of Khnum-khuf as certainly a third. What if the two falcons of Khufu refer to a joint reign of Khufu and Khnum-khuf, and the three falcons of Dadefra to a triple co-regency of Khufu, Khnum-khuf, and Dadefra all together? This is at least an hypothesis to be tried.

The name of the mother of Athet is recognised as Hapt, with the title of priestess, *khend*, before it. Many minor readings follow which should be utilised.

On reaching the reign which is identified in our last number with Semerkhet, M. Daressy sees traces of the name of King Qa, and of the name Qebh. This assumes that Qebh was the real name of this king, whereas the contemporary remains read Sen, and Qebh is only a late mis-reading of the true name. This identification, therefore, cannot be accepted. The traces which are supposed to be the h of Qebh are really the long stick held by the man in the name of Semerkhet.

Two of the pieces of the Cairo Annals are stated to really join, a matter which, of course, we must accept, as it has been verified in handling the pieces. The habit of assuming that documents are in error now leads to saying that on the Palermo Annals there is a mistake in putting two years of cattle census consecutive instead of biennially. It seems much more likely that we do not know if a census was irregularly deferred or repeated because of errors. To boldly state that an error has been made in the Annals, when we know nothing of the circumstances, is far too self-sufficient. We must all thank M. Daressy for a very careful fresh reading of the stone, to which others will doubtless add many more examinations when peace permits.

We now reach what is the key to all the rest of this Paper, on which is based a reconstruction of the entire chronology. This rests upon an estimate of the length of the slab or slabs by means of the continuance of the reigns of the Vth dynasty from one register to as far along in the next register; and an estimate of the height by the fact of a hinge socket at one edge implying a threshold, which is presumed to be of a double door.

To take first the question of the total length of the slabs. The occurrence of years of Sahura in superposed registers, the middle of the 4th coming over the end of the 14th year, indicates 9½ years of Sahura in the length. The end of the 10th year of Neferkara coming just beneath the beginning of his 1st year, indicates 10 years of his reign in the length. These 10 years M. Daressy extends, for some unstated reasons, to 12 spaces, and adds a border of half a space each side and so arrives at 13 spaces for the whole. The evidence of the stone does not seem to prove more than 95 or 10 spaces. The length of the spaces was not equal. In the very brief entries of the first three dynasties, each line has a different size of space. In the reign of Sneferu, of which we have only three spaces, they vary in size as 3 to 4. Only two complete spaces can be traced in the Vth dynasty, and those differ, showing that they were not laid out by measure, but depended in each year on the amount of inscription of the year. This is also indicated, if we grant any value to the numbers in Manetho (which are correct for Sahura), by the space of 10 years above named containing also 20 years of Userkaf, and 26 years of Shep-The measurable length of a year of Userkaf 7.8 inches, or seshaf and Userkaf. Sahura 8.2 inches, can by no means be safely applied to all the missing parts. It indicates about 82 inches for the length, if all the years of those kings were alike. and if the rest of Userkaf's years and those of Shepseshaf were only half as fully recorded. The length of 107 inches, adopted by M. Daressy, cannot be taken as more than one of many possibilities, and any reconstruction based on that is equally uncertain.

Secondly, there is the question of height. The edge of a pivot hole is described as being at the top end of the piece. It is assumed that this was for one half of a double door, it is also assumed that it was for the stationary half, and as no bolt hole

is seen in the slab, therefore the length of the slab does not reach the middle. From this position it would result that the doorway had a clear opening of 30'9 inches, and that the stone with a guessed amount for border would be 2 cubits, 41.2 inches high. But it does not seem at all known that it was for a double door, for under three feet wide a single door is more likely; nor is it known at all where the axis came beyond the end of the slab, if the door were double; nor is it at all known whether the height of the slab went across the doorway; it may have been at right angles to that. There does not seem then to be any real definition of the size in either direction by the proposals brought forward. Hence the whole question of reconstruction, which is dealt with in 25 pages, remains in air, so far as any proof goes. One point only is clearly to be remembered, that the Annals were engraved on a row of slabs, and not on a single slab; for the thickness of 2 or 2½ inches precludes a greater length than about 40 inches at the outside. A longer slab of that thickness would be too easily broken by its own weight in moving it.

Some of the remarks of M. Daressy on the historical position should be noted. He believes that there were four rows of predynastic figures at the beginning, and that these included the kings, the followers of Horus (as in the Turin Papyrus), and the spirits of Buto and Hierakonpolis, beginning with the gods.

The order of the kings in the IVth dynasty has long been a difficulty. The main kings are well known, yet other kings seemed by their remains to come between them. A system of co-regencies is proposed, by which these minor kings were reigning with the great kings. We may perhaps go further on this line, with tentative explanations. What if the long reigns of 63 years of Khufu and 66 or 56 years of Khafra were correct and included these minor reigns? What if the cause of these minor reigns was the appointment of a crown prince as ruler at the sed festival, and if he died before the elder king the appointment of a second viceroy? The table of M. Daressy is given here, only adding Khnum-khufu on monumental grounds. The Arabic numerals are in the order of the Turin Papyrus, the Roman numerals in the order of Manetho. The lines of genealogic descent are omitted as they are far from certain:

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I. Snefru = Soris(I).
2. Khufu = Soufis (II). Khnum-khuf.
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- 3. Dedefra = Ratoises (V).
- 4. Khafra = Soufis (III). 5. (Bakara =) Bikheris (VI).
- 7. (Dedefptah =) Thamphthis (VIII). 6. Menkaura = Menkheres (IV). 8. x.
- 9. Shepses kaf = Seberkheres (VII).

Thus, the Turin Papyrus went down the main kings, and then noted the co-regents. The list of Manetho took them in their historical order. This seems a very likely arrangement; and if the co-regents were the sed-feast viceroys, who died before succeeding as sole kings, the explanation would be well completed.

A proposal is then made that Herodotus (and from him Diodorus) confused the names of Vth and XXVth dynasty kings, and so brought in the Ethiopians after the Pyramid builders. The explanation of M. Apostolides that a roll of MS. was misplaced in the second book of Herodotus seems a much better explanation. That suggestion has been greatly confirmed by tracing the division of the second book into twelve rolls, and by the catchwords of the beginning of the misplaced rolls being alike, and so leading to confusion.

There is then much that must be carefully recognised in this long study of the early dynasties, though several cardinal points in it do not commend themselves to others.

Le Cercueil de Khu-n-aten.—G. DARESSY (Bull. Inst. Fran. arch. Orient., T. XII).

This Paper gives a detailed description of the coffin found in the tomb at Biban el-Meluk in 1907. The other objects found in that burial have been published, but the coffin was in so decayed and damaged a state that nothing could be done till it had been restored. As this has now been done so far as possible in the Cairo Museum, M. Daressy—always diligent to issue fresh documents—has given a detailed description of it.

The head of the coffin was covered with curls carved in ebony, and fixed with pegs. On the front of it was a bronze uraeus, with the Aten cartouches upon it, and the tail waving up to the top of the head. The whole was gilt, the sheet of gold forming the face had been anciently robbed. The eyes were inlaid, the eyelids and brows with blue glass. The wooden beard was inlaid with lazuli between ribs of gilding. The body was entirely wrought in feather-work inlays, let into the wood, of about 1,500 pieces, all different in shape and size. The inlay was of carnelian, dark blue glass imitating lazuli, light blue glass for turquoise, and selenite crystallised.

The inscription bears a strange history. The cartouches have all been destroyed, in hatred of the person. But the titles are those of Akhenaten undoubtedly. Yet this inscription has been altered, and one less-changed determinative shows that it was originally for a woman. As she is called "the beautiful child of the Aten," it could not be for any queen earlier than Tyi; and as having been altered for Akhenaten, it must be for a queen who died before him. This seems to fix it as made for Queen Tyi. M. Daressy then gives a translation of the restored original text, consisting of the usual phrases of the period, and notes how each of the individual references was altered.

As to the identity of the body found in this coffin, M. Daressy concludes that Akhenaten was buried at Tell Amarna, as his tomb is there, and he had vowed never to leave his new capital. Hence the suggestion is made that the body was that of Tutonkhamen, the first king to cast aside the Aten, and to return to Thebes; if so, the heads on the canopic jars found with the coffin will be those of Tutonkhamen, and a resemblance to his portraits is affirmed.

L'Égypte Céleste. G. DARESSY (Bull. Inst. Fran. arch. Orient. T. XII).

In this Paper the Zodiacal lists are used which are in more regular order than the signs on the planisphere of Dendereh. The signs in these lists are described, and compared with the series of gods from Nubia to the Delta. Many correspondences are noted, and the conclusion as to the celestial parallel to the earthly kingdom shown to be probable. The principal connections are: Saturn, Horqa = Meharraqa Horqa; Aquarius, Nile figure pouring out of two vases = Oerti, the two fountains of the Nile at the Cataract; Hordeshert, Mars = Horus of Edfu; Pisces, two fishes = Latus of Latopolis; Jupiter, Horus = Mentu of Hermonthis; Ram=Amen of Thebes; Double god, falcon and Venus planet = Hathor of Dendereh; Twins = Anhur and Mehyt of Thinis; Woman holding child = Merymutf, Khnem of Lycopolis; Virgo = Hathor of Cusae; Sagittarius with heads of man and ram = Hershefi of Heracleopolis. The other connections are less definite, and often can only be traced by a play upon words. These are, however, enough to show how with some ingenuity the Egyptians had modified the signs of external origin, so as to link them with a geographical order of appropriate gods.

NOTES AND NEWS.

Some remarks on Miss Murray's Paper on "The Egyptian Elements in the Grail Romance" have been received from Miss Jessie Weston. Her special knowledge of the Grail literature makes these remarks welcome, though we have made some abbreviation, as the subject lies mostly outside of our Egyptian scope. She writes:—The geographical parallels in which Miss Murray is interested are restricted to the *Grand-Saint-Graal*, a romance which, all critics of the cycle are now agreed, belongs to the latest stage of cyclic redaction. It is an enlargement and extension of Borron's *Joseph*, constructed with a view to the *données* of the prose *Lancelot* in its final form; and the numerous cross-references between *Grand-Saint-Graal*, *Lancelot*, and *Queste*, point to a redaction carried out with a systematic purpose in view, and very possibly under the direction of one guiding hand. The special geographical features, however, have affected the *Lancelot* not at all, and the *Queste* but slightly, *i.e.*, in the introduction of Mordrains, and the mention of Sarras as the final home of the Grail.

The early stages of the Grail cycle, the independent poems, the original Borron trilogy, show no signs of such a contamination. Thus, I would deprecate the form of the title as misleading; "Egyptian Elements in a Grail Romance" would be more correct. Readers should surely be warned that the romance in question is one to which modern scholars attach a very restricted importance—it is too late to be of value as evidence for sources. . . .

It must be remembered that we have at present no critical text of the romance in question, nor, indeed, of any save the *Parzival*. Dr. Sommer's recent publications are based on his own selection of MSS., and, while valuable for reference, are neither final nor authoritative. Hence we do not yet know the precise form of the proper names, *e.g.*, the Grail Castle is written Corbenic, Corberic, or Carbonek, to say nothing of minor variants. We can hardly speculate safely on the derivation of the word till we are agreed as to its original form. It may be the deformation of a Celtic name, and, as such, not have figured in Miss Murray's geographical group at all.

Yet the parallels, alike in place names and liturgical details, are arresting; how, then, shall we explain them?

Here I would point out that a text of the thirteenth century ought not to be illustrated from present-day ritual, without making it clear that the Liturgy in question has not undergone substantial modification, and that the parallels to which attention is drawn really existed at the time that the romance was written. Taking this for granted (and it ought to be proved), it appears to me that the conclusion to be drawn is that the compiler of the Grand-Saint-Graal had at his disposal, besides the Borron Joseph, the Lancelot and its Queste, a MS. containing: a. a Conversion; b. a Consecration legend, which may or may not have been associated with the same hero, and which were most probably connected with the origins of Egyptian Christianity, possibly with the foundation of some local Church. There is no reason whatever to suppose that Joseph of Arimathea was the original protagonist. I should be inclined to think that the stories were independent, and that, the "Conversion" story having been assigned to him, his son was invented in order to connect him, tant bien que mal, with the second tale.

A well known name in Egyptology was that of M. PAUL PIERRET, formerly Conservator at the Louvre, who died at the beginning of this year at Versailles, at the age of seventy-nine. To every beginner the name of Pierret's Vocabulaire is familiar; and, though prepared more than forty years ago, it is still useful for quick reference where the many heavy volumes of larger dictionaries are not needed. M. Pierret entered the Louvre at the age of thirty-one, and was Conservator from his thirty-eighth to seventieth year. His earliest publication was the Études égyptologiques, 1873–78, in which the inscriptions of the Louvre are the most important part, as being the only publication of that material. Then quickly followed the Vocabulaire in 1875, Dictionnaire d'archéologie égyptienne, 1875, Catalogue de la salle historique, 1877, Panthéon égyptien, 1881, Décret de Canope, 1881, Livre des Morts, 1882, and Monuments de l'Égypte et de l'Éthiopie, 1885. Thus all his published work was issued between the ages of thirty-seven and forty-nine; it has the general character of diligent and practical compilation, much of which has not been superseded by any fuller publication.

Enquiries made by Dr. Gordon, on behalf of the Philadelphia Museum, now prove that the action of that Museum in taking over a site already occupied by the British School was based entirely on the official statements of the Department of Antiquities, and was quite legally in order on that ground. Unfortunately, this course was followed without the smallest reference or warning to the British School, as excavators of the site for six years past. We hope that the incorrect statements made in Philadelphia, that we had renounced the site, and that it would be all worked by others, will be withdrawn.

France has suffered severe losses among the Egyptologists. Mons. A. J. Reinach has been missing since the first month of the war. Capt. Weill is severely wounded. M. Sollas is wounded. M. Daumas, the artist of the *Institut Archéologique*, is wounded. Besides these there are the sad losses of the sons of Sir Gaston Maspero and M. Daressy, already known to our readers.

We should have congratulated M. Foucart sooner on his Directorship of the *Institut Archéologique* at Cairo. This post has usually been the training ground for future Directors of the Department of Antiquities.

We have to announce the promotion of Lieut. Engelbach to be Captain, R.E.

Mr. Mackay has joined the Camel Corps.

Mr. Brunton has resigned his Red Cross administration, to the great regret of the staff at Netley, and passed for the Artists' Corps.

THE PORTRAITS.

Les Monuments dits Hycsos.—Par JEAN CAPART. 8vo, 46 pp., 29 figs. 1914. (Bruxelles, Vromant.)

Just before the war, the curator of the Egyptian Museum at Brussels issued—from what was then a peaceful and happy land—a study of importance in early art. Expecting that it would raise a general discussion, we did not then notice it. As now it seems that the world is hopelessly rent for long to come, by the policy of "world-power or going under," and it will be many years before fresh work can be done, a summary of this pamphlet should be put forward.



SPHINX OF TANIS. CAIRO MUSEUM. COMPARE BEARD OF OPPOSITE FIGURE.

The strange group of royal monuments, mainly round at Tanis, differing from any Egyptian sculptures, was assigned at first to the Hyksos by Mariette, and to this day they are often so called with some apology. Other works akin to these were noticed later, a bust in the Fayum, and another which had been brought to Rome and was found on the Esquiline. By 1893 Golénischeff saw a resemblance to the statues of Amenemhat III, and attributed all these works to the XIIth dynasty. The style of work in every respect, and the far greater strength and heaviness of the face, forbade such an identification. The resemblance might indicate a descent from the same stock. That all the Hyksos inscriptions on the figures were re-appropriations was clear enough, and the only question was, when before that age could such sculptures have been done? The next location for them was to ascribe them to the oriental invaders who overthrew the Old Kingdom. As we had no statuary of those people, there was nothing to contradict, or to support, such a view. Now Dr. Capart brings up the proposal that this mysterious group

belongs to the archaic art before the IVth dynasty, and that it was through such work as this that the Egyptians reached the supreme art of the days of Khufu and Khafra.

The subject has been much complicated by the carefully carved appropriations of such sculptures by Pasebkhanu I of the XXIst dynasty. His name on the chest of each sphinx is well and deeply cut, and the surface has been fully cleared before from all traces of earlier inscription. This, however, does not deceive as to the maker, for the erased Hyksos inscriptions on the shoulders show a far earlier date.

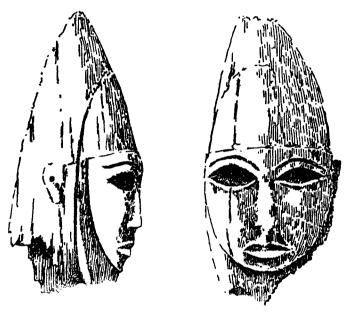


POTTERY LION OF HIERAKONPOLIS.

The case is rather different with the two so-called fish offerers. On this group of Hapi figures holding altars there is no earlier inscription, and that of Pasebkhanu is so finely and boldly cut that many—perhaps most—writers granted these to be original work of the XXIst dynasty and so accepted the idea of a Tanite school of sculpture keeping up these peculiarities for a thousand years or more. An important comparison is raised between the three Hapi statues—one of Tehutmes III, this of Pasebkhanu, and one of Sheshenq, just after. The details of the altar before the figure in the XVIIIth and XXIInd dynasties nearly agree,

that inscribed in the XXIst dynasty is quite different. This is a good reason for its being a much earlier work. The peculiar thick ringlets of hair and arrangement of it are shown to be closely the same on the Tanite group as on the figure now in Rome. Hence it seems that the whole of this class of sculpture must be connected, and belongs to a special age rather than to a special locality.

The comparisons brought forward as links with this group are especially, (1) the beard sweeping down from the temple along the jaw below the mouth, alike in the Fayum figure and the fish offerers, and rather slighter in the Roman figure; this is like the beard on a Hierakonpolis ivory head, and a statuette clearly of prehistoric age in the MacGregor Collection; (2) the flat circular spread of hair round the faces of the sphinxes, unlike any Egyptian sphinx, but like the disc of hair around the lion from Hierakonpolis and the lion altar from Saqqara, both of the early dynasties; (3) the thick ringlets of hair of the Hapi figures and the Rome bust, like the shorter, thick, ringlets of the kneeling king of Hierakonpolis. Another comparison is the semi-circular pendant over the shoulder of the Fayum



IVORY HEAD OF HIERAKONPOLIS.

COMPARE PORTRAIT OF HAPI FIGURES.

figure like the similar pendant over the shoulder of a seated figure of Onkh-tekh at Leyden, and borne by the attendant of Narmer on the palette. This is not of much value as it occurs with the panther-skin dress of a priest of Khensu, and is probably a priestly decoration which continued for ages. On the ground of these comparisons, Dr. Capart proposes to see a close relation between these peculiar figures and the early dynastic or prehistoric style, and claims a position before the IVth dynasty for them.

Let us now review the periods before the Hyksos Age, when these figures were already old.

In the XIIth dynasty we know the style in use from many examples, and there is no trace of the peculiarities named above. There is a slight facial resemblance to some of the later kings of the XIIth dynasty, and some of the heads which have been called Hyksos—as the colossi of Bubastis—are probably of the XIIth; but the characteristic work cannot be placed there.

In the dark age of the VIIth to Xth dynasties there are no comparisons, and Dr. Capart relies on the argument that such works as these would imply a total break of the traditional style which appears to be unbroken from the Old to the Middle Kingdom. Certainly in relief sculpture the decay was gentle and continuous until the XIth dynasty renascence.

In the great age of the IVth to the VIth dynasties there is no possible place for a different style.



FIGURE OF KING OF HIERAKONPOLIS. COMPARE HAIR OF ESQUILINE PORTRAIT.

In the IInd and IIIrd dynasties we have the two seated figures of Kho-sekhem, the kneeling granite figure at Cairo, the panels at Hesy, and several figures which must belong here, as Sepa and Nesa, the figures of Leyden, etc. In all these, though some slight approaches to the peculiar style may be detected, yet the usual chain of Egyptian development leaves no room for such great differences.

In the Ist dynasty there is the ivory king of Abydos, and several other ivory figures from there, but all purely Egyptian. At Hierakonpolis not a single ivory

figure has the heavy ringlets of hair, and only some have the all-round beard, which after all is known among Bedawy and other races. The relief figures of Narmer and of his men show no trace of the peculiar style in any way.

We are driven back then, step by step, to the unknown age of the predynastic princes of Heliopolis and the Delta, and the comparison of the beard in two or three cases, and the approach to the ringlets of the kneeling king, are the only help in this period. It seems that we must definitely say that there is no other choice than the predynastic, or an intrusive art of some later period which did not break up the Egyptian style. Seeing that hard-stone carving seems to have been unknown in the Ist dynasty, it is difficult to suppose that an earlier age had surpassed that great time of development. If we look to any later age we must grant that it is quite as difficult to put an intrusive art in during the Ist–IIIrd dynasties as it would be in the VIIth–Xth dynasties. In either case it would break across the Egyptian development. But as the interval VII–X is of over four centuries' length, there is much more time for such a break than there is between Narmer, the ivory king of Abydos, the granite kneeler, Kho-sekhem, the Hesy panels, and the early private statues. These form a chain of two or more points in each dynasty, where no great change can be presumed.

The resemblances between the peculiar style and the predynastic figures would be quite accounted for, if the race of these early figures again penetrated Egypt in later times, and there is nothing against such movement having occurred. The entry of such people just before the Middle Kingdom would best account for the facial resemblances between them and the kings of that age.

On the whole, therefore, it still seems most probable that this peculiar style of heavy ringlets, massive face, and low beard, belongs to the Eastern invaders who broke up the Old Kingdom, and who had some kinship with other people who appear at the beginning of the dynasties. The only alternative is to place the highly finished immense figures of black granite in a totally unknown period, before the rising art of the Ist dynasty.





BUST FOUND ON THE ESQUILINE, ROME.
IMPORTED FROM EGYPT.
BLACK GRANITE. THERMAE MUSEUM.

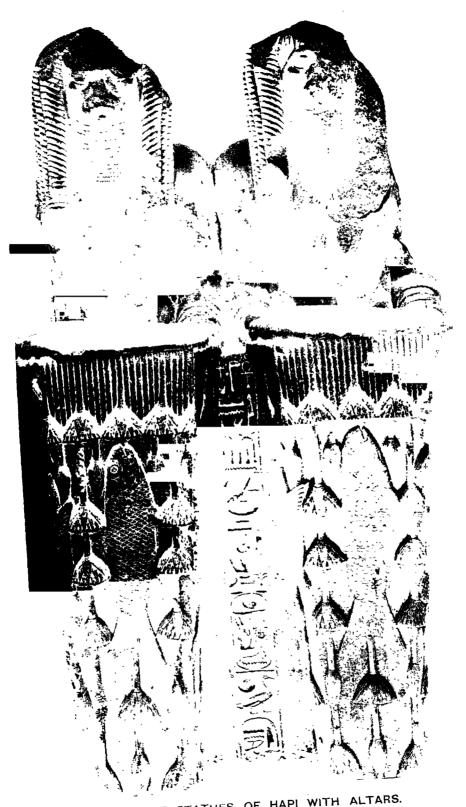


BUST FOUND AT THE CAPITAL OF THE FAYUM.

IN INSIGNIA OF A HIGH PRIEST OF KHONSU.

GREY GRANITE.

CAIRO MUSEUM.



JOINT STATUES OF HAPI WITH ALTARS.

CAIRO MUSEUM.



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